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JOURNAL

VOLUME 16 NUMBER 9

SEPTEMBER 1950

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SPECIAL COLOR DIVISION ISSUE

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TERRITORIAL COLUMNS

PSA in Canada

By REX FROST
37 Bloor Street W., Toronto, Ont.

Most camera club activities in Canada have been dormant so far as formal indoor meetings are concerned. Club picnics and outings have been the order of the day during the summer months.

Much planning has been done by club officials for the coming season. Indications point to a strong trend in favor of consolidation and unification of club policies and programming, on both a local and national basis. Clubs have been thinking in terms of collective rather than individual problems.

Need for and desirability of a self-administered Canadian Territorial Division of PSA has become a growing topic of discussion. Nanaimo's Stan Daikin and Port Dover's Harry Waddle were among prime movers of the idea last fall when they took part in a group pow-wow of Canadians attending PSA St. Louis Convention.

Recently Oliver Smith, general secretary of the Canadian-American Portfolios, gathered a group in his Toronto home to meet St. Louis' Jane Shaffer, who vacations at Northern Ontario's Lake Joseph. Sam Vogan was there representing color interests. Evelyn Andrus voiced the outlook of the professionals. Cliff Cole was spokesman for monochrome and general club interests. Dorothy Burgess was considerate of the social side of club activities.

At that meeting ways and means of promoting the drive for PSA Canadian memberships came up. At which point logically the question was asked: "What is PSA going to do for its Canadian members?" . . . The subject of educational programs raised the consideration of what could be done to stimulate a PSA program for the benefit of individuals and small clubs in the widely scattered communities of the Dominion. Other questions raised were: "How soon can an east-west Canadian portfolio be set up?" "How about a portfolio between English and French speaking members?" "Should Canada have a representative on the PSA Board?"

Expressions of opinion on these subjects from individuals and club executives Canada-wide, especially from the smaller communities, would be very welcome. Address them to your present columnist for presentation through regular PSA channels.

Smilingly attractive Florence Barkey, one of the numerous feminine enthusiasts of Toronto CC, recently assumed the role of a goodwill ambassador between eastern and western Canada. Spent part of her vacation in Victoria and Vancouver, B. C. Attended a meeting of New Westminster CC at Bob Young's invitation. Was impressed by the business-like nature of the session. Joined two carloads of clubsters on a Sunday trip up the Fraser River.

PSA JOURNAL, Vol. 16, Sept. 1950



Raptor Telephoto f/5.6 available in 8", 10" and 15" focal lengths

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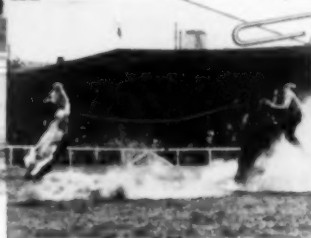
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Was thrilled by the scenic splendor and the hospitality of the westerners. Watched a fellow shooting pictures in Stanley Park. Chap introduced himself . . . asked Florence to pose in a picture . . . said he needed color emphasis. Florence had it. Red coat in everything. Remarks that Vancouver seemed like Toronto. Oh. Oh!

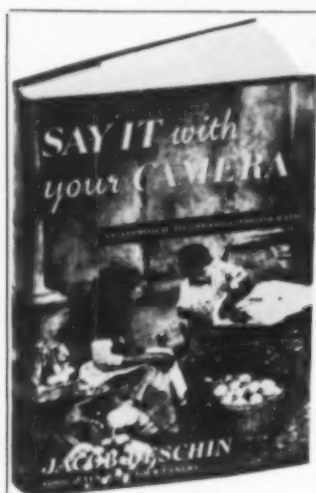
New Westminster CC officers decided about the same time that they needed a point of color emphasis in club activities. Announce the formation of a color division which will go into operation in September with no extra dues.

Victoria CC and Irvine Dawson, Salon Director, must be congratulated on the

smart front cover of the entry form for the tenth local annual salon. Totem pole heads whose eyes dramatically strike you right in the cornea, much as to say "I'm looking at you, Mr. Salon Exhibitor . . . and October 5th is the deadline." Sort of a Mortensen "Command to Look" complex about the sheet, and with an appropriate local oomph.

Katsuo Takakuwa, of 1984 Jichijoji, near Tokyo, Camera Pictorialists of Japan, is Hon. Sec. of one of the oldest and largest camera clubs in Nippon. About 600 membership. Seeks to reestablish connection with secretaries of Canadian salons and

(Turn to page 460)



This 230 page illustrated book by Jacob Deschin, APSA, may be purchased at \$3.00 post-paid from

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THE PRINT

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by ANSEL ADAMS



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ILLUMINATION . . .

AMONG THE frequently praised and blamed items of photographic equipment is the PSA Standard Light Box. It has been undergoing an overhauling by a sub-committee of PSA Technical Division Standards Committee to meet the objections of those who have criticized it, probably with righteousness, certainly with candor, and frequently with profanity.

PRESENT IDEA is to standardize the end rather than the means. Object is to establish a standard level of illumination which, so far as possible, will permit photographic prints to be judged under lighting conditions similar to those under which subsequently they will be viewed.

THE PSA light box came into general use since its inception some years ago. It represented a serious attempt to provide standard lighting conditions for judging. It was the result of no little study by technical and lay minds alike. It answered a need and it served its purpose.

THE WORLD has made substantial progress since the light box was developed. Fluorescent lighting has come into use. More is known about the quality, and the effects, of illumination. Light meters have become precision instruments. Photographers, working with better tools, materials, and techniques, are more critical.

TEN or a dozen years hence a new generation of photographers may regard today's efforts as outmoded. That is a penalty of progress, quite to be expected. Main idea is that PSA shall progress, whatever the penalty. The PSA Standard Light Box was a good job, a milestone for advancing photography. V. H. S.

PSA CONVENTION

Baltimore, Md., October 18-21, 1950

PSA JOURNAL, Vol. 16, Sept. 1950



Leica

makes better pictures easier

REHEARSAL—by **Adrian Siegel**, Philadelphia, Pa. Informal portrait of Eugene Ormandy conducting the Philadelphia Orchestra.

Taken without supplemental lighting at distance of 30 feet with Leica IIIc and 85mm., F:1.5 Summarex long focus coated speed lens, 1/60 second exposure.



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Designed especially for the photographer who must often work under well-nigh impossible lighting conditions, the new Leica Summarex 85mm., F:1.5 lens is a triumph of modern optical precision.

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(Continued from page 457)

camera clubs. Would like to have club bulletins from Canadian groups and copies of recent salon catalogues. Maybe some Canadian PSAs would like to get in touch with him. He writes excellent English.

Drive of Champions

This Month's Tip

Any hunter likes to go after big game occasionally. He likes to "go for bear!" Maybe you're that type too. Maybe you'd like to hunt for big game in the Drive of Champions.

If your answer is "yes," then here's the tip: Go after Cornerstone Memberships.

Cornerstone Memberships are surprisingly easy to sell. They net you 20 points each. The high scores built up by Stu Chambers, E. P. Wightman, and Fred Quellmalz are due in part to Cornerstone Memberships.

Credit in the Drive is given only for fully paid Cornerstone Memberships but that's no hindrance because the Drive still has plenty of time to run. As soon as memberships are paid the points are credited, if sponsorship came after the Drive started.

Tackle the philanthropic members or charitable individuals who aren't members. Remember to impress on your candidates that Cornerstone Memberships are tax deductible.

A penny postal card to Headquarters will bring you the dope on the Cornerstone idea. Also, see the November 1949 PSA JOURNAL, page 709. The Drive of Champions Tally will be brought up to date and published next month.

Another Suggestion

The following is quoted from Edith M. Royky's recent letter. She's from Sioux City, Iowa, and has earned 5 points so far in the Drive of Champions. She's been on vacation and says the following:

"I carried a bunch of PSA application blanks in my camera bag, and whenever we met other 'shutter addicts' if they were not members of PSA we would tell them about it and give them an application blank. I don't know yet what the results are on this, but publicity has never hurt any organization.

"Have found here at home that the

portfolios create a great deal of interest and as we have plenty of them coming in to the apartment we take every opportunity to show them and tell our friends about how they operate and about PSA. That's all there is to our sales promotion for PSA memberships."



"Join the PSA and I'll Marry You!"

OFFICIAL NOTICE

Annual Membership Meeting

The Annual Meeting of the Membership will be held at 3:15 p.m., October 18, 1950, in Baltimore, Maryland, in conjunction with the Annual Convention. The meeting will be in the Calvert Ballroom of the Lord Baltimore Hotel.

The agenda for this meeting will be comprised of an open-floor discussion on operation of PSA, with particular emphasis on activities, benefits, and services provided by PSA. Any member wishing to raise any other items of business may do so by informing the presiding officer of his desires.

J. G. MEYER, APSA, President

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Convention Personalities

ELEANORA T. VELENOVSKY, *Publicity Chairman*

WHERE WILL you find the greatest group of photographers gathered at one time? Where can you see the best in photography, be it monochrome or color, still or movies? At the PSA Convention in Baltimore, of course!

Here on October 18, 19, 20, and 21, you will see and hear many outstanding photographers of national and international renown. They will exhibit their work and tell you how their most famous pictures were made.

Maybe you would like to know something about these people you are going to meet during those four "time-of-your-life" days down in Baltimore. Well, time won't allow us to tell "all" about all of them nor even "some" about all of them, but maybe we can mosey around a bit in the crowd and see who we can point out to you before the real "big-doings" start—sort of whet your appetite for what is ahead.

Ralph Gray's Movies

Well, here's Ralph Gray, APSA, FACL, who will show you, with "Glamorous Guatemala" and other films from his prize-winning collection, what an amateur can do with his camera. Mr. Gray took up movie making in 1936, after having had one-man shows of stills in various cities and acceptance in several salons, and has been a consistent winner in national and international contests. Ten of his films have received thirteen awards, including two Hiram Percy Maxim Memorial awards—the highest open to amateurs. Mr. Gray is also well known as a lecturer, appearing under the auspices of the National Lecture Program of PSA.

We want you to meet Jacob Deschin, APSA, and John Hogan, FPSA. These two gentlemen, along with Adolf Fassbender, Hon. FPSA, the old Master of Photography in America, and Bruce Downes will conduct the Panel Discussion on "Pictorialism, Modernism, Futurism." Aside from the examples set by his photographic work, Mr. Deschin has helped others with his fine articles in practically all of the photographic periodicals that have come and gone, as well as those that remain and with his many well-known books.

Mr. Hogan we all know as a Past Chairman of the PSA Pictorial Division, as well as a lecturer, salon judge, and exhibitor of note.

Now here we have Baltimore's own Edward L. Bafford who is going to show you how a bromoil print is made by actually making and inking one right before your eyes. Mr. Bafford, who is a nationally recognized authority on this advanced phase of photography, is also rated as one of the finest exhibition photographers both here and abroad. One of his photographs is in the permanent photographic exhibit of the Metropolitan Museum of Art in New York City and another is in a similar collection in the Baltimore Museum of Art. He has conducted photography classes in Baltimore for many years.

Over there is Philippe Halsman. He is very well quali-

fied to tell this Convention about "Magazine Cover Photography," as he has spent the past 20 years as professional photographer in the fields of portraiture, magazine photography and advertising, and has had more LIFE magazine covers published than any other photographer. We know you have seen his "The Frenchman."

Of course, famous photographers are not always men. To prove that, there's Mrs. Harold L. Medbery—or maybe you know her as Lorena R. Medbery, APSA. She is quite a traveller and photographer and has hundreds of beautiful color transparencies that confirm both of these statements. You will have the opportunity of seeing her "Europe Through the Camera Lens" Friday. Mrs. Medbery is a lecturer and a noted exhibitor in national and international salons, where her slides have won many awards.

By the way, on Saturday, L. Whitney Standish, FPSA, is going to demonstrate "Composing Pictures with Oomph." Mr. Standish has quite a record as salon judge and speaker, as well as teacher of both private and public courses in photography. He is an author of many articles on various phases of photographic technique and composition which have appeared in most of the better known periodicals. During the past fourteen years, as exhibitor in various salons and competitions, he has been a consistent winner of prizes and awards.

Oh, there's Gottlieb Hampfler, FPSA. "Flower Photography" is his specialty and he is rated top ranking salon exhibitor for 1949 in this field, having received many salon and contest awards for his work. He has written articles, illustrated books and lectured widely on this phase of photography.

New England Slides

Now we want you to meet Roy L. Bulger, who, like many other great photographers, began his career with the box camera. He also got his first taste of camera clubs with the Baltimore Camera Club. Mr. Bulger, who will tell us "What Makes New England Different from the Rest of the United States," specializes in color work for projection. His slides and lectures cover not only New England, but also such widely scattered places as Gaspe and Florida.

Louis J. Parker, APSA, will help you with "Print and Slide Exchange Sets." He is a member of the Camera Club Committee of PSA and is constantly working to better the shows for PSA circulation. Mr. Parker, along with lecturing and his regular photographic work, has taught photography extensively.

We still have time to "see" Carl Mansfield, APSA, M. Photog., who is going to tell you how to get "Human Interest in Pictures." Mr. Mansfield, who received his Master of Photography degree in 1949, is a four-star exhibitor and is listed among the top ten exhibitors for the past five years.

Gosh, it's almost time for the "Big Day" and we haven't, as yet, met half of these photographers—but wasn't it exciting meeting those interesting people! Well, we'll meet them, all of them, old friends and new, at the Convention in October. If you don't want to miss any of this—and we know you don't—fill out that reservation blank and mail it now. Don't wait until tomorrow—mail it today!

For special contest notice see box on page 486.

TENTATIVE PROGRAM (as of August 1, 1950)

Wednesday, October 18

- 9:30-11:45 AM—Registration, Lord Baltimore Hotel
9:30-10:30 AM—MPD Board of Directors Meeting—Installation of New Officers
10:45-11:45 AM—PSA Board of Directors Meeting

- 1:30-3:00 PM—Motion Picture Division Meeting
1:30-3:00 PM—General Reception, Lord Baltimore Hotel
—Wardlaw M. Hammond—First showing of PSA Permanent Print Collection Transparencies
3:15-5:00 PM—General Membership Meeting—All Divisions
—National Council Meeting
7:30-10:00 PM—Formal Opening of PSA Exhibition at Baltimore Art Museum
—Presentation of Progress Award Medal, Progress Medal Lecture, Lloyd A. Jones, Hon. FPSA
—Showing of Color Slides
—MPD—K. Siems, "The Hobby I Love"
—Pictorial, Nature, Technical and Color Print Exhibition

Thursday, October 19

- 9:30-10:30 AM—CD, ND, PD, PJD, TD, CCs—"The Use of Tape Recordings for Camera Club Programs"
—P. H. Gelman, FPSA, "Photography of the Nude"—Tape Recording
10:30-11:45 AM—CD—"The Use of Tape Recording for Color Transparency Programs"—prepared by George Blaha
—CD—Adrian TerLouw, APSA, Eastman Kodak, "Preparing Talks for Projection Programs"
—PD—Gottlieb A. Hampfer, FPSA, "Flower Photography"
10:30-11:45 AM—MPD, CCs—Club Publicity Program—"Projects for Movie Clubs." Showing of picture, "Deed to Happiness," by Cincinnati Movie Club
12:00-3:00 PM—Field Trip for all attending Convention—Cruise of Baltimore Harbor—Oysters and Lunch aboard
7:30-10:00 PM—MPD Program for entire membership—Ralph Gray, APSA—"Primitive Patzcuaro," "Our Friendly Enemies," "Glamorous Guatemala," and "Paricutin."

Friday, October 20

- 9:30-11:45 AM—TD—Clinic on Cameras, Equipment, Procedure and Materials
9:30-10:30 AM—CD—George A. Young, APSA—Color Slide Clinic
—MPD—Executive Committee Meeting
—PD—Commentators Conference
9:30-11:45 AM—PSA Board of Directors Meeting
10:45-11:45 AM—CD, MPD, ND—Edward A. Hill, APSA, "Invisible Motion"
—PD—Directors Meeting
11:45-1:15 PM—TD Luncheon and Annual Meeting
1:40-3:00 PM—CD, TD—Color Clinic, Howard Colton, APSA
—MPD—Amateur Motion Picture Show
—PD—Edward L. Rafford, "Bromoil Demonstration"

- 1:40-5:00 PM—ND—Samuel Dunton, N. Y. Zoo, "Animal Photography"
—ND—Dr. Brown, Botanist, "Plant Photography"
—ND—Mark Mooney, Jr., APSA, "Judging of Nature Prints"
—TD—K. Pestrecov, APSA, Bausch & Lomb, "A Theoretical Study of Errors of Focusing Scales"
—TD—G. Espy, Weston Electrical Instrument Corp., "Densitometers and a True Exposure Meter and Their Applications"
—TD—Dr. Harold E. Clark, The Haloid Co., "Xerography Plate Sensitizing"
—TD—Lt. Comdr. W. R. Fraser, USN, "Television Recording in the Navy"
—TD—Other papers of a technical nature
3:15-5:00 PM—CD—Paul Wolf, "Make the Most of It"
—PJD, MPD—Dave Stickel, WMAR-TV, "News Photography for Television"
5:00-7:30 PM—MPD Annual Banquet

- 7:30-8:45 PM—CD, ND, MPD program for entire membership
—Charles J. Cignatta, "Wildfowl of the Chesapeake"
—Mrs. Harold L. Medbery, APSA, "Europe Through the Camera Lens"
9:00-10:30 PM—PD, Program for entire membership, Philippe Halsman of LIFE Magazine, "Magazine Cover Photography"

Saturday, October 21

- 9:30-10:15 AM—CD—Color Transparency Show, "Color Photography in England"
—PD—Maurice Tabard, "Portraiture"
9:30-11:45 AM—MPD—Motion Picture Division Meeting
—TD—C. T. Holliday, Johns Hopkins University, "High Altitude Photography"
—TD—Allen Stimson, APSA, General Electric Co., "Effects of Spectral Energy Distribution on Photographic Exposure"
—TD—Capt. J. H. McElroy, USN, "New Developments in Naval Photography"
—TD—Other papers
10:15-11:45 AM—CD—Fred Tietzel, "Double Exposures and Composites to Tell a Story"
—ND—Annual Committee Meeting
—PD—Adolf Fasshender, Hon. FPSA, Bruce Downes, Jacob Deschin, APSA, John Hogan, FPSA, Panel Discussion, "Pictorialism, Modernism, Futurism"
1:30-3:00 PM—CCs, CD—Louis J. Parker, APSA, "Problems of Print and Color Exchange Sets"
—CCs, CD—George M. Rowan, "What Makes a Good Club Bulletin"
—PD—Carl Mansfield, APSA, "Human Interest Photography"
—PJD—John R. Whiting, APSA, "Reader Interest in a Photographic Magazine"
1:30-3:15 PM—TD—Paper Session
3:15-5:00 PM—CD—Roy Bulger, "What Makes New England Different from the Rest of the USA?"
—PD—L. Whitney Standish, FPSA, "How to Compose Photographs for Oomph"
—TD—Ralph Evans, Eastman Kodak Co., "Derivations from Color Photography"
—TD—Howard Colton, APSA, Eastman Kodak Co., "A New Color Disclosure"
7:30-10:00 PM—Annual Banquet
—Presentation of Awards

The Technical Division Program is subject to slight modification from that given. Additional talks by speakers from Ansco, Eastman Kodak Co. and Zoomar are being scheduled. Topics will be announced next month.



A FARM SCENE

Earle W. Brown, APSA

TAKING PICTURES in the great outdoors, especially during Autumn, offers excellent opportunities to the aspiring camera artist with imagination and a knowledge of composition. Many take vacation trips in the fall when nature is at its best for both monochrome and color rendition, and there are picture possibilities wherever you may go. You may decide that the pictorial material in your locality has been completely exhausted, and yet someone from another area will come into your home territory and find successful salon subjects which you have overlooked. What is the answer? Just that we all see pictures differently, and one person, perhaps, has more creative imagination than another.

What field equipment is needed? First of all, a good camera with a lens having good resolving power. The twin-lens type of camera has become popular in recent years, and rightly so. It enables the photographer to

OUTDOOR PHOTOGRAPHY

EARLE W. BROWN, APSA

see his composition in the ground-glass and predetermine with more exactitude the ultimate appearance of the subject matter. By memorizing the depth-of-field scale for your lens, you can obtain the maximum sharpness in your pictures. A tripod is important and should be with you on all trips. Don't forget the exposure meter, and check yourself occasionally to see that you are exposing your film correctly. If you plan to include sky in your pictures, don't overlook using a K-2 or a G filter in conjunction with a good lens shade.

Nature supplies you with the light. Use it wisely. Backlighting and sidelighting produce the most dramatic effects. In bright sunshine, you have a long contrast range to cover. Your film has far more capabilities to encompass this scale than the paper on which you make the print. Therefore, you must compress this contrast

that their relationship, one with another, and with the object of their association, expresses a unity. Simplify your composition by avoiding extraneous or distracting matter. In those cases when you happen to be working close to the subject, in harsh sunlight, the use of a synchro-flash at the camera will lighten the heavy shadows and prevent extreme contrasts.

Architecture

This branch of photography is broad in scope, but it requires imagination to rise above the snapshot class. Get close to your subject and feature some of the details, instead of trying to see how much of the building you can put into your picture. The columns, the steps, the doorways, the interiors of buildings, the staircases, and decorative bas-relief are all potential pictorial subject matter, and are suggestive of many others. If you will refer to the salons and the photographic magazines, you will find many successful presentations of architectural subjects. Don't be afraid to dramatize the composition. Remember to use your tripod, and secure the greatest possible detail by the use of a small lens aperture.

Industrial

In any city where there are industries, there are numerous possibilities for interesting pictures. Many factories are situated on rivers or canals, giving you an opportunity to employ this medium of lead-in. Roadways, railways and rows of buildings also make good leads into a picture of this type. Use arches and gates for framing. Smoke stacks, and the smoke or steam coming from them make excellent centers of interest. Study your composition in your ground-glass; watch your lighting; move around and make several exposures from different angles, and you can come up with gratifying results.

Landscape

This field offers more potentialities for photographic pictorialism than any other, because no matter where you live you have opportunities for landscapes. Drive through the countryside, and if it is hilly, so much the better. Select a winding road leading up a hill toward a farm with a nice white barn or silo; place the buildings in the one-third position in the picture area; get the best lighting possible; and shoot first from a low camera angle, and then try the same view from the top of your car. The angle of approach will make a big difference in the final result. Fences, streams, rows of trees, pathways and other similar media can be used effectively for entrances into the picture.

Study your location for the best time of day to take the pictures. Don't hesitate to return at another time, to obtain the best result. If the picture is worth taking, it is worth taking right. The presence of clouds, as a rule, improves the sky area immeasurably. Don't just take a picture because the scene seems pretty—arrange your composition properly with a definite center of interest, and then you will meet pictorial requirements.

Marines

This type of picture is always popular. Scenes at the waterfront of boats tied up at the docks, the operations



SUMMERTIME

Earle W. Brown, APSA

into a printable range. This can be controlled largely by over-exposure and under-development. It is important to retain detail in the highlights as well as in the shadows. On foggy, rainy or snowy days, when subject contrast is low, endeavor to increase the contrast, in order to put snap in your pictures. This is accomplished by under-exposure and over-development. Avoid taking monochrome pictures at mid-day, when the sun is directly overhead, because the lighting is flat and the picture will lack brilliance.

What type of outdoor pictures will you take? That is up to you. The field of outdoor photography is broad, and covers the following varied branches:

Genre

Take pictures of people doing things. If more than one person comprises the subject of the study, make sure

of loading and unloading the vessels, the repairing of nets, etc., all offer real opportunities. Sailboats in action likewise make excellent subjects. On rocky coast lines, the angry breaking of the waves into high-tossed spray, and the foamy turbulence of eddying water make virile pictures of great drama. In the depiction of expanses of water, it is preferable that the horizon line does not divide the picture into equal parts.

Portraits

Portraits in soft shadows can be very pleasing. This technique eliminates squinting, which is a common fault in most outdoor pictures of this nature. However, some very striking portraits can be taken in the sunlight, with the sun coming in from behind and the face lighted by a reflector. This method will bring out nice texture in the hair. Watch out for distracting backgrounds and mergers with incongruous objects.

Sports

This branch of photography falls, primarily, in the documentary classification. However, under favorable conditions, very interesting shots of action can be made that may qualify as pictorial studies in the genre field. Even though the sports pictures you are taking are essentially documentary, they can be among the better ones in their class if careful attention is paid to such matters as lighting, viewpoint and camera angle, composition, stopping of action and sharpness of focus.

Flowers

Flower studies, *in situ*, can be classified as either pictorial or nature photography, and good examples of this work are successful in either category. Segregate certain specimens from groups, and use a gray or blue cardboard as a background to separate the subject from the out-of-focus material behind it, that so commonly spoils such pictures. Use side or back lighting with a reflector or synchro-flash to fill in the shadows. Be sure to focus sharply on the principal object, and if it is a still day, employ a slow shutter speed and a small lens aperture for the greatest depth of field.

Nature

Many persons devote their entire photographic efforts to nature studies. Pictures of animals, birds, reptiles, insects, and the various forms of botanical growth offer limitless opportunities to use your imagination. You can build blinds to get close to your live subjects, and you can employ telephoto lenses to good advantage. In this field particularly, patience is a prime necessity. The successful presentation of natural history subjects calls for the preservation of maximum details, so watch the various technical operations by which that quality can be attained.

Summary

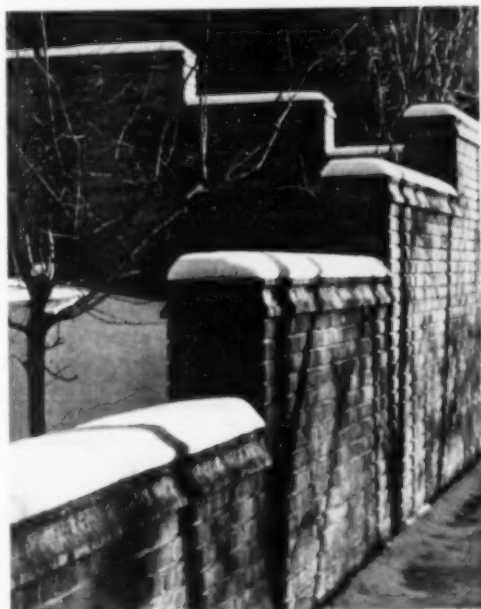
In conclusion, there are summarized in tabular form a few of the more important points to keep in mind in the practice of outdoor photography:

Learn the simple rules of composition, and use them.



PARADISE

Earle W. Brown, AP/SA



KINGSWOOD PATTERN

Earle W. Brown, AP/SA

Have one center of interest in your pictures.
 Avoid mergers, in tone and line, of principal objects and background elements.
 Simplify your arrangements—eliminate distracting material.
 Where appropriate, take advantage of items that will serve as natural entrances into your pictures.
 Employ the human-interest element in your scenes, where possible.

Dramatize your pictures, when justifiable, by the use of unusual viewpoints and camera angles.
 Study the lighting and use it to best advantage.
 Use the proper lens filters.
 Focus sharply and expose carefully for the conditions.

With application and experience will come proficiency, and with proficiency will come the satisfaction of artistic self-expression.

A Seeming Contradiction in "Flash-Fill" Exposure

FRANK E. CRANDELL *

SINCE THE publication, several years ago, of the instruction manual for the Norwood Director Exposure Meter, letters and inquiries have continued to come in at frequent intervals from photographers with this question: "Why, in the exposure tables for flash fill-in sunlight, do you indicate that the flash bulb must be closer to the subject for a longer exposure, and farther away for a shorter exposure? Obviously, this is a misprint, and you intend the exact opposite."

In reality, of course, this is not a misprint, and the tables are correct. Nevertheless, the reasons for this seeming paradox are at once so simple and yet so difficult to explain simply that it seems worth while to present a full discussion of the question so as to clear it up once and for all.

Basically, the only reason for the seeming paradox is the fact that one tends to think of flash in terms of its use as the sole light source, overlooking the fact that in the case of "flash fill" we are combining two light sources—the sun, which is of substantially constant brightness (during reasonable intervals) and a flash bulb, which rises from zero brightness to a high value and then falls back to zero, all within a small fraction of a second. However, let us leave generalities behind and take concrete figures on a typical flash bulb, the No. 5.

In Figure 1 is shown the curve for the light output of the No. 5, as published by General Electric. Time is reckoned in milliseconds (one one-thousandth of a sec-

ond), and light in millions of lumens. We see that after the button has been pressed, eight milliseconds go by before any light whatever appears. At eight milliseconds the aluminum wire starts to burn, and at 20 milliseconds it has reached its peak value of 1,100,000 lumens. After that, it tapers off steadily until at 50 milliseconds (one-twentieth of a second after the button was pressed) it has again fallen to zero.

Taking the closest values we can read from the published curve, Table I shows the light output of the No. 5 during each of the 50 millisecond intervals in which we are interested. The first interval is from 0 millisecond to 1 millisecond, the second interval is from 1 to 2, and so on.

A glance at this table, and the corresponding curve, will show that the ideal synchronizer would be one which would always center the peak of the flash at the exact midpoint of the shutter opening, so that we would utilize a maximum of the light on both sides of the peak. A moment's reflection will show us, however, that this is virtually impossible. For 1/200th, the shutter would have to open at the end of 17 milliseconds, for 1/100th, at the end of 15 milliseconds, for 1/50th, at 10 milliseconds, and so on. In other words, the solenoid would have to have a different lag for each setting of the shutter tension. While not impossible, this is obviously highly impractical.

Let us assume, then, for the purposes of comparison, that the synchronizer is set to open the shutter blades at the end of 17 milliseconds. To keep matters simple,

* Photo Research Corp., Burbank, Calif.

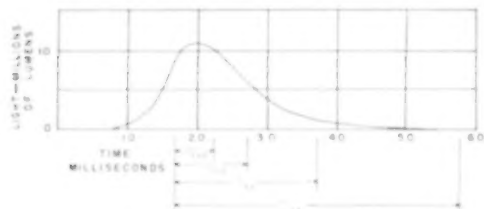


FIGURE 1. Curve for light output of G.E. No. 5 bulb.

TABLE II

Shutter Speed	Millisecond Intervals	Total Output Second-Lumens	Average Second-Lumens
1/200	18th to 22nd	5,275	1055
1/100	18th to 27th	9,460	946
1/50	18th to 37th	12,520	626
1/25	18th to 57th	13,200	330
1/10	18th to 117th	13,200	132

TABLE I

Millisecond Interval	Second-Lumens Output
1st	0
2nd	0
3rd	0
4th	0
5th	0
6th	0
7th	0
8th	10
9th	30
10th	65
11th	107.5
12th	152.5
13th	220
14th	310
15th	430
16th	600
17th	812.5
18th	975
19th	1057.5
20th	1095
21st	1085
22nd	1060
23rd	1005
24th	930
25th	850
26th	750
27th	650
28th	562.5
29th	487.5
30th	412.5
31st	350
32nd	300
33rd	250
34th	212.5
35th	187.5
36th	162.5
37th	137.5
38th	117.5
39th	105
40th	95
41st	82.5
42nd	67.5
43rd	55
44th	45
45th	35
46th	25
47th	17.5
48th	12.5
49th	7.5
50th	2.5

TABLE III

For time of	Output (lumen-sec.) For fixed lamp position		
	Should be	Actually is	Should be
1/200th sec.		5,275	
1/100th " 1 stop less	10,550	9,460	10,550
1/50th " 2 stops less	21,100	12,520	21,100
1/25th " 3 stops less	42,200	13,200	42,200

we will assume ideal shutter performance, i.e., a shutter which opens and closes instantaneously. If shutter efficiency were to be taken into account, differences would be larger in the following computations than they are. However, we are not computing exposure values, but merely showing *why* the exposure differences are necessary, and why they seem paradoxical.

Taking our values from Table I, we can now reckon the light output of the flash bulb for different time intervals in Table II. Values have been rounded off, since they are approximate.

Table II begins to make it clear why the relation between shutter speed and light output of a flash bulb is not a simple one. At 1/200th, we get 5,275 second-lumens of light. If 1/100th gave us twice as much, we should get 10,550 second-lumens, but actually we get only 9460. If 1/50th gave four times as much, we should have 21,100 second-lumens; actually, we get 12,520. At 1/25th, we should have 42,200, and actually have 13,200. At 1/10th, we should have 105,500, but only get 13,200.

Sunlight is quite another story. If the shutter is open twice as long, it lets in twice as much sunlight, so we can close down one stop and the exposure (time multiplied by intensity) remains the same. If we make four pictures in sunlight, at f/8 and 1/200th, f/11 and 1/100th, f/16 and 1/50th, and f/22 and 1/25th, experience tells us that the results will be practically identical.

With flash bulb, the results are quite different. At f/8 and 1/200th, our flash bulb gives an output of 5,275 second-lumens. At 1/100th, it gives 9,460 lumen-seconds, and since we have stopped down to f/11, this is cut in half, giving us the effect of 4,730 second-lumens, as compared to the previous 5,275, so we must move the flash bulb in a bit closer to have the same exposure (intensity \times time). At 1/50th, the bulb gives us 12,520 second-lumens, but since we are closing down to f/16, the effect on the film is one-fourth of this, or 3,130, which means we must again move it in. At 1/25th, the light output has risen to 13,200, but as we are stopping down to f/22 (or three stops down from our first exposure) the effective illumination will be one-eighth of this, or 1,650th, so we must again move it closer to the subject.

Table III shows what the lumen-second effective output actually is and what it would have to be in order to keep the bulb at constant distance.

Since the actual output is less than required for unchanged lamp position, the bulb must be placed closer to the subject for a slower shutter speed (with smaller stop) than for a short shutter speed (with large stop).

For speeds faster than 1/200th second, the output of the flash bulb is constant for all practical purposes and will remain a fixed fraction of the brightness of the sun so the required lamp position remains unchanged. For speeds longer than 1/25th second, no additional light is received from the flash bulb so the change in position is just that required to compensate for the change in f/stop.

The values given in this article should not be used for the determination of exposure, since such added complications as shutter efficiency have been ignored. Actual values should be taken from the Guide Numbers published by the lamp manufacturers or the tables in the Norwood meter manual.

"How To"

No. 9 — MAKE COLOR AND BLACK-AND-WHITE PICTURES BY FLASH, FIRST INSTALLMENT

JOHNNY APPLESEED, APSA

MANUFACTURERS of photoflash lamps boast that 68% of all black-and-white still picture film exposures were made by photoflash last year. Since this column is devoted to better photography, here's the first installment of our contribution in the flash field to help PSA members to do a good job with their share of the flash pictures.

If there's any one phase of photography that's abused, photoflash is it. The purpose of this month's column is to pass on basic and important information frequently overlooked in discussions on flash photography. Later we'll continue with some dope on special flash techniques.

Batteries

Fresh batteries are a must. Furthermore, they should be photoflash batteries, made specifically for the purpose, not the common hand flashlight variety. Ordinary flashlight batteries don't pack the wallop necessary for good results, nor do they have the stamina found in photoflash batteries. This is particularly important in cameras using less than three batteries, because at best two batteries give the bare minimum quantity of electrical current needed to fire a flash bulb. Any good photographic dealer can show you the special photoflash batteries.

Here's the type of trouble you can get into by using ordinary flashlight batteries or old batteries. You may shoot several pictures in fairly rapid succession, say 6, 8, 10, or more in less than an hour. All seems to be going well. The bulbs fire each time you push the button and you have a marvelous time. Then you process your negatives and when you turn on the white lights after fixing, you can't believe your eyes. Beginning suddenly in the exposure series the image becomes weak or there's no image at all. Negatives 1-7 may be fully exposed and number 8 thin.

Why? The answer is that repeated use sapped the too-weak batteries' strength. A point was reached at which the power was below that necessary to flash the bulb at the moment the shutter was full open. It did muster enough power to fire the bulb a fraction of a second after the shutter reached the full open position. In effect, poor batteries caused the shutter and flash to operate out of synchronization.

Because of their limited critical exposure latitudes, color films are more susceptible to this kind of trouble than black-and-white films. The wider permissible latitude of exposure in black-and-white films frequently gives printable negatives when no picture would result in color.

Film Choice

The biggest single defect in flash work is "blocked-up highlights." Blocked-up highlights show in prints as areas without delicate tone gradation, as tones become progressively lighter going from middle tones to the brightest highlights. They show up particularly in faces and light colored objects in the scene, giving such areas a chalky appearance. This is partly due to poor exposure

techniques, but a big factor can be your choice of film.

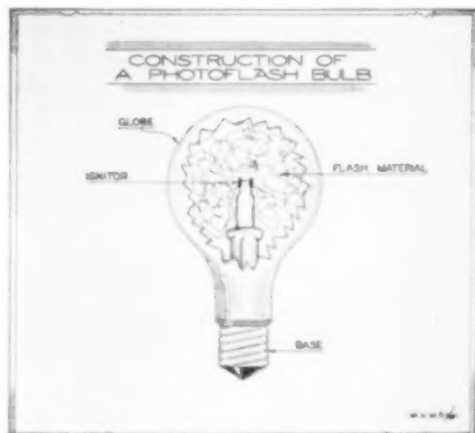
It's easier to get pleasing skin tones in flash photography with orthochromatic films (such as Verichrome, Plenachrome, or the orthochromatic sheet films) than when panchromatic films are used. Most photographers don't realize this orthochromatic superiority; they use pan films and struggle needlessly with washed-out, chalky skin tones and blocked-up highlights.

The reason for the tendency to get blocked-up highlights with pan film is interesting: It involves characteristics of flash bulbs, films, and subjects. Clear flash bulbs emit light that is high in the proportion of red light compared with daylight. Panchromatic film is highly sensitive in the red region of the spectrum. Human skin and white objects reflect red light to a greater extent than other usual picture subjects, such as clothing and backgrounds.

These factors add up to produce disproportionately high negative density for skin and white objects and unless exposure and development are controlled very carefully with pan film, highlight separation is lost.

With ortho film, since there is no red sensitivity, only the blue and green light produced by the flash bulb affects the film. Since the skin reflects less blue and green light than red, the amount available for negative density is considerably less with ortho film than with pan and so negative density is lower in skin areas at recommended exposure. The same applies for white objects. This characteristic permits the film to differentiate between small differences in illumination and it doesn't block up. When this type of negative is printed, flesh tones reproduce in the print as graded highlight tones and not as so much white wash.

Of course, it is possible to get blocked-up highlights in orthochromatic films if they are badly overexposed or overdeveloped. The difference between panchromatic and orthochromatic films lies in the latitude of error the



photographer can make before poor quality results. In this latitude, orthochromatic films excel. Likewise, it's possible with careful handling and correct exposure to get good quality from panchromatic films.

Another approach is to use blue bulbs with pan film, but this is uneconomical because both bulb and film cost more than the orthochromatic-clear bulb combination. Furthermore, *blue bulbs give less than half as much light as clear ones of corresponding size.*

About the only time that pan film is preferable to ortho for flash work is in the case where the greatest possible speed is needed.

Flash Bulbs

There are 4 major types of flash bulbs: F, M, S, and FP. To a large extent the one you choose will be dictated by your camera equipment. These types differ in duration of light output and the time required to reach maximum light output. F means fast; such bulbs reach their peak in 0.005 second. M means medium; such bulbs reach their peak in 0.020 second. S means slow; such bulbs reach their peak in 0.030 second. FP means focal plane.

The F-type bulb is exemplified by the "Speed Midget." It reaches its peak light output about 0.005 second (5 milliseconds) after the electricity reaches it. This bulb is commonly used with simple cameras with no shutter delay mechanism, such as box cameras, but many more expensive cameras can also use it. The base is small. F-type bulbs have a lower light output than other bulbs of similar size and base diameter, such as S or 25. Actual light output figures will be given in a later column.

There are several M-type bulbs that differ from each other in light output and base size but they all have the common characteristic that they reach illumination peak 0.020 second (20 milliseconds) after the electric current is applied. For shutter speeds faster than about 1/50 second, the shutter must be delayed to realize the maximum light output from these bulbs. Many cameras have a special adjustment to delay the shutter by the amount of time necessary to catch the peak light output of M-type bulbs. Bulbs with the following numbers are M-type: S, 25, 5B (B refers to blue), 25B, 11, 0, 22, 40, 22B, and 40B.

S-type bulbs are slow compared with F and M, reaching peak outputs of light in about 0.030 second (30 milliseconds). These bulbs have high illumination intensity. They can be used with M shutter settings at shutter speeds up to 1/25 second. At faster shutter speeds their values are partly lost because shutter and flash are not fully synchronized. S bulbs are good for "open flash," a technique to be discussed in a later column. Typical S-type bulbs are 50 and 3.

FP bulbs are designed for cameras with focal plane shutters. They reach illumination level in about 0.020 second (20 milliseconds) and continue for 0.020 seconds at about the same intensity. They can be used for focal plane shutter speeds of 1/25 to 1/1000 second. Typical bulbs are the 6, 31, 26, and 2A.

While several bulbs may do the job for you, there is usually one style that's best for your purpose. A later column will give data to help you make selections.

Each flash bulb has two strips of ignitor (see diagram)

that start the metallic flash material burning. These ignitor strips are connected by a thin wire to carry the electric current from one strip to the other. If this thin, connecting wire is broken, the bulb will not fire. If a bulb fails to flash, examine this connection before gambling further film with it. If the wire is found intact, examine the bulb base and the receptacle on your camera to be sure that all contact surfaces are clean.

Film Development

Depending upon the type of enlarger and camera reflector you use, slight adjustments in usual development time may be desirable. Generally speaking, for single condenser enlargers (like Kodak Precision A), panchromatic film exposed with clear bulbs should be slightly underdeveloped (about 75-80% of usual time for sunlit scenes), and ortho films exposed with clear bulbs should be slightly overdeveloped (between normal time and 125%). Double condenser enlargers (like Omega) generally require about 60-70% and no increase, respectively.

Another important factor in flash film development is the surface of the flash reflector. Reflectors with satin finishes usually give slightly lower contrast than reflectors with polished reflecting surfaces. You should experiment to find the best time to fit your camera, film, and enlarger. Aim for good prints on normal contrast paper (No. 2).

Exposure

Most photographers expose flash shots improperly. They overexpose black-and-white films and underexpose color films. To get good results requires accurate exposure within fairly narrow limits.

Unfortunately, manufacturers of films and bulbs can give only average recommendations that cannot take into account the differences existing between camera lenses, shutters, reflectors, color and brilliance of subject matter, nearness and color of walls, etc.

A little experimentation will help you land on a technique that fits your equipment. Shoot for good tone gradation (no blocking up) in highlights and in skin tones and the rest of the picture will take care of itself.

If you're a careful worker, you'll examine your results critically and adjust your operations accordingly to compensate for variables of equipment and intangibles. Remember that manufacturer's instructions are for average conditions and if you want better than average pictures you'll have to study your results carefully, think, and adjust your techniques according to your picture. If you are unable to evaluate your work, see some other PSA member for advice, come to the PSA Convention with your work, or drop me a line.

One of the prime requisites of good print quality is texture and detail in the print highlights. Shoot for that objective!

This field of flash photography is a big one that deserves exploration. Do you have some pet ideas you'd like evaluated? Or some neat little tricks you're willing to share with others for the betterment of amateurs? Why not drop me a line at PSA Headquarters, 2005 Walnut Street, Philadelphia 3, Pennsylvania? Best comments will be published as space permits.

Next Month: How to Make Flash Pictures, No. 2.

How to Film a Football Game

ROBERT H. UNSELD

THE OTHER evening, at a friendly gathering in a neighbor's recreation room, we saw the football films made last year by several movie makers of the neighborhood. Frankly, they amounted to a collective pain in the neck. The exposures were all right, but almost without exception, the scenes showed nothing but men piling up in heaps, kicks for point after touchdown, the hand, and the hat of the man in front. One chap did get a good shot of a pass being received, but just as the receiver got in the clear, the man in front stood up, and the next shot was a wild crowd cheering for the touchdown that Gray Hat

had obliterated. Then, too, nobody could remember what games they were or who won 'em.

We decided then and there that a set of simple, easy-to-follow suggestions for filming football games is decidedly in order.

A big football game is one of the few great, truly American spectacles, and it is certainly true that with your movie camera you can record the pageantry and excitement if you avoid the hit-or-miss method. First of all, plan your picture. Anything worth filming is worth a little thought and organization. Make your picture tell a story. The shots we are going to mention here need not be filmed in the order of their appearance, and you will probably think of a good many more that we have missed.

You might title your films with a headline from a Saturday morning paper, "Michigan-Illini Tilt to Draw 80,000." Follow with a close-up of a hand, holding your tickets spread fan-wise. If you drive to an out-of-town game, or go on a special train, get a few shots featuring your transportation. If the day of the game is especially cold, make a few scenes in which your blankets and other cold-weather gear are prominent. A close-up of a thermometer registering about 10° would be particularly effective. The same idea goes for the reverse, an Indian summer day.

When you get to the field, give your party its tickets and tell the folks you'll see 'em later. Make a distant shot of the stadium, crowds streaming toward it from every direction, a close-up of the line at one of the ticket windows, and single shots of the banners floating in the wind. Every stadium will have some individual characteristic feature, some landmark dear to all alumni, and you may want to add pictures we cannot know about.

All this is build-up material. You can't start a football film cold, with shots of vague piles of players and 2- or 3-yard gains. It won't mean a thing to your audience, nor to you three months later.

Make up your mind to do your filming of the game from an aisle or from the top of the stadium. The man with the hat will be in front of you when you are seated, and you can't expect him to remain glued to the board while someone is manufacturing a touchdown, any more than you yourself.

Be sure to get the kick-off. If you miss the first one, there will be another, which can be spliced in at the



Best camera angle is from slightly above the playing field.



When movies for study purposes are made from ground level, the players near the camera cover up the camera view of the action in the background.



Still pictures used for news purposes are usually more dramatic when made from a low angle.

beginning. You must have this, for no other shot so eloquently announces the start of the game.

You can't hope to film every exciting play, for, unfortunately, they are not announced in advance. The few seconds of thrilling pictures you see in the newsreels are the cream of the hundreds of feet the cameramen had to shoot in order not to miss the highlights of the game. Few amateurs will want to film an entire game just to get one or two good runs or the succession of passes that resulted in the winning touchdown. You will have to depend on luck and upon your knowledge of football. Of course, when the home team has the ball and seems on an inspired march with fifteen yards to go for a score, you have a better chance for spectacular plays than when the boys are deep in their own territory. When the team has the ball within striking distance of a touchdown, or when the two previous plays indicate that the quarterback has something definite on his mind, you have a good chance for a trick play or a pass. For a reasonably good chance to get some good plays, if you know anything about the game, count on shooting about twice as much film of the actual play as you will want in your finished picture.

Procedure on Passes

When the ball is passed or punted, get the sender of the ball, but don't try to follow the ball through the air. It is a dark object against other dark objects, and even if you do succeed in keeping it in the view-finder, you can hardly distinguish it on the screen. Instead of following the ball, swing down to the receiver, who will nearly always be pretty evident, and get him as he catches the ball (you hope). If you can follow the ball better than you can pick out the receiver, follow it, but with the starting button released until just before the catch. If you are after dramatic interest and not strict accuracy, any forward pass and any catching of a pass can be spliced together.

Be sure to get a touchdown or two. There will be times when the teams are near the goal line for two or three downs, and if the ball isn't put over, try it the next time. Then make a shot of the cheering crowd.

Intersperse your scenes of actual play with pictures of the score board now and then, even a shot of the figures changing after a score, if you can catch it. Shoot the newsreel cameraman atop the press box, and don't forget the cheer leaders and their acrobatics.

Human emotions are on parade at a football game, and you can catch expressions and actions here that you couldn't buy elsewhere. Stay in the aisle and shoot down the row wherein your friends are seated. When the ball is on the 2-yard line and only the 4th down remains, control your excitement and catch the tense, almost painful facial expressions as the play is made. If the ball goes over, you will be amazed at what your film records. If the 4th-down try fails, the miserable disappointment registered all down the row will be just as funny, a week after the game. If you chance to be near one of those real football fanatics, the sort who dies a thousand deaths up in the stadium for dear old Alma Mater, you have a chance for a good "running gag." Get four or five shots of him as he rises to berate or to cheer, as he waves

his hat, as he buries his face in his hands. Splice one of these scenes every fifteen or twenty feet through the actual play part of your film, and by the time the third one appears, your audience will howl. If you feel that this gag is too good to miss, as we do, you might arrange in advance to have one of your friends play the part.

Close-ups are important, but unless you have access to the side lines, probably most of them will have to be confined to the spectators. Perhaps you could get close-ups of the individual players at a practice session the week after the game.

Between halves, the band will extend its musical greetings to the opposing side, and some college band formations are well worth photographing. From your position at the top of the stadium, you will be able to get the words or symbols as the men form them on the gridiron.

The picture could end with a shot of the score board, followed by one of the timekeeper, eyes on his watch, firing the gun in the air. The latter can be faked quite easily at home, and does not have to be shot at the game.

The film we have described gives about as much footage to sidelights of the game and to human interest as it does to actual play. To create and sustain interest, you must build up and maintain the atmosphere. However, the footage given to each phase of the game is up to you, and you can always assemble your film as you want it when you do the final editing. Be sure to supply adequate information as to who played, where, and who won the game, either by filming such natural titles as a newspaper clipping, the game program, and the score board, or by adding titles.

Mechanics of Football Movies

As for the mechanics of the movie making, you should have a telephoto lens, in addition to the 1-inch or 1 1/2-inch lens standard on 16mm and 8mm cameras respectively. The standard lens will include a good portion of the entire gridiron, and the players will be rather small. Most football coaching movies are made with 3- or 4-inch lenses, on 16mm cameras, but a 2- or 3-inch lens will probably be better for the amateur who is not eager to follow every movement of every player. These latter two lenses on 16mm cameras bring in the same field as do 1-inch and 1 1/2-inch lenses on 8mm equipment. For your shots of the spectators and other atmosphere scenes, use the standard lens. Use it for some of the actual play, and use the telephoto lens a great deal for close-ups of team work. Use the telephoto for the score board and the cheer leaders. Be sure to hold your camera especially steady when your telephoto lens is in use.

Film some of the play in slow motion if your camera can be operated at 32 or 64 frames per second, making sure to change your lens setting accordingly.

A good exposure meter will be an invaluable aid, and perhaps it would be wise to count on doing most of your filming during the first half of the game. Lighting conditions are governed to a certain extent by the height of the stadium and by its position with respect to the sun, but light fails rapidly on hazy, autumn afternoons, and you will do well to expose most of your film before the shadows lengthen.



GEESE

Erno Vadas

FROM THE COLUMBUS
INTERNATIONAL EXHIBITION
OF PHOTOGRAPHY



CARTUJOS

Jose Ortiz Echague

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PSA JOURNAL, Vol. 16, Sept. 1950

Get Your Money's Worth!

STELLA JENKS, *Editor*

Are you getting your money's worth from your PSA membership?

Every person who reads this article has paid PSA dues in the hope of getting something in return. For some it may be the news of what is going on in the photographic world—for others it may be the inspiration to be gained from articles in *PSA JOURNAL*—but for the great majority of photographers, it is the desire to improve their own skill as individuals that prompts them to maintain membership in PSA.

So you want to improve your photographic ability? Well, what are you doing to attain that goal?

It is a well known fact that what we get out of any organization or group is directly proportional to what we put in that group. So it is with membership in the Pictorial Division of PSA. In order that each member may have complete information on the various activities in which he may participate, we present this month a summary of all of the activities which the Pictorial Division is currently sponsoring for its individual members. Choose your activities—participate in more than one if you can—but get your money's worth.

The Convention

Have you ever attended a PSA convention? This is the first activity in which you should plan to participate. The convention this year will be held at the Lord Baltimore Hotel in Baltimore, Maryland, on October 18-19-20-21. Details are to be found elsewhere in this issue of the *JOURNAL*. No matter what your interests in photography, you will find a program which will give you help and inspiration. And if you like the "extra exposure" sessions that your club group has, you will find many new kindred spirits from all over the United States with whom to discuss photographic problems and methods. Attend the 1950 convention!

American Portfolios

From the standpoint of sheer numbers, this particular activity probably has the most participants. Portfolio circles are formed of 15 people, all from different places in the United States, each of whom enters one print in the circle. The portfolio circulates among its members about once in each six months, each member comments on the prints in the portfolio (except his own), makes suggestions for

improvement, and writes a "round robin" note to all of the other members about photographic and personal happenings in which the rest of the group may be interested. After circulating to all of the members, it goes to a Commentator, chosen for outstanding photographic ability, who makes additional comments and suggestions. Then off it goes on another round.

You may never meet all of the members of your portfolio, but when you do it is as one meeting an old friend (I know, it happened to me). I can also say from personal experience that each and every one of the 20 or so members and past-members of my own portfolio have been helpful and friendly to the nth degree. I hold each of them as very particular friends of mine. And each time the portfolio reaches me, I can hardly wait to open it and look to see what new pictures are in it from each of the members. It is fascinating—and helpful—and a real photographic inspiration.

And you need not feel that just because you use a 35mm camera instead of an 8x10, you would be at a disadvantage. For there are special portfolio circles for those with special interests. For the large group interested in pictorialism, there are Pictorial Portfolios. If you prefer to work in the control processes, there is a portfolio requiring that prints be made in one of the photographic processes (other than straight enlargement or contact printing on commercially sensitized paper) such as gum-bichromate, bromoil, carbos, platinum and palladium prints, mediobrom, paper negative, etc. If you use the small size negatives (smaller than half 127), you can join the Miniature Portfolios where all workers use the small negatives. If you enjoy nature subjects, join the Nature Portfolio. And for the more advanced worker who has exhibited in the international salons, there is the Star Exhibitor Portfolio composed of workers of comparable advancement. If Photo-Journalism is your interest, membership in both the Pictorial Division and the Photo-Journalism Division will permit you to participate in these portfolio groups.

Do not feel that you must be an advanced worker to participate in the American Portfolios. For the beginner, these groups offer encouragement and help—and for the advanced worker, inspiration and solution to problems. In fact, to encourage the beginner the Pictorial Division is making Medal Awards to those members who have their first print, which is circu-

lating or has circulated in a portfolio, accepted in a recognized international salon.

Full information about all of the American Portfolios and application forms to enable you to join in the fellowship of this activity may be secured from Eldridge R. Christhill, Hon. PSA, Director, PSA American Portfolios, Suite 406, 800 Davis Street, Evanston, Illinois. The service charge for participation is only \$1.00 per year for most portfolios.

Portrait Portfolios

Then, for those who are interested in portrait work only, there are similar Portrait Portfolios. These function in the same manner as the American Portfolios, except that subject matter is limited to portraits (character, costume, or straightforward likenesses of baby or Aunt Susan). In addition to the benefits derived from friendly exchange of help in securing better portraits, members of the Portrait Portfolios receive without charge each quarter their own bulletin on portrait work, "Portrait Pointers," edited by Maurice H. Louis.

The service charge for these portfolios is also \$1.00 per year, and information and entry forms may be secured from Paul J. Wolfe, Director, PSA Portrait Portfolios, 124 East Jefferson Street, Butler, Pennsylvania.

International Portfolios

Would you like portfolio friendships with an international flavor? Would you like to compare your work with that of some of the best workers overseas? If so, the International Portfolios are your dish.

These portfolio groups are about equally divided between the American and the foreign workers and portfolios are circulated similarly to the American and Portrait circles. At present there are international circles going nearly all over the world—England, including a circle of all medical workers, Australia New Zealand, Sweden, France, Cuba, South Africa, Dominican Republic, Brazil, Canada, India, Belgium, Costa Rica, Holland, and China.

Because the foreign photographers who participate in this activity are generally the more experienced workers, and because the Pictorial Division doesn't want to get any photographer into an activity beyond his depth, applicants are requested to send their application with a brief resume of their photographic backgrounds and interests to Miss Jane J. Shaffer, APSA, Director PSA International Portfolios, 5406 Clemens Street, St. Louis 12, Missouri.

Personalized Print Analysis

So you want to make better pictures! One of the best ways to improve your work is to get the opinion of others about your pictures. In order to be sure of the greatest amount of help, it is best to get this help from someone who is competent to render assistance of the highest caliber. This is done through the Personalized Print Analysis.

This service of the Pictorial Division is under the able direction of J. Elwood

Armstrong, APSA, and is rendered without charge. However, a few simple rules must be followed. Prints should be 5 x 7 to 8 x 10, sent first class with return mailing label and first class postage included. On the back of each print should be the name and address of the maker, title of the picture, technical data and pertinent details. Also include a brief statement of the idea or purpose behind the picture, and the purpose for which it was taken (club contests, salons, etc.). To help the analyst do as good a job as possible, a contact print of the entire negative should be attached to the back of the print.

Prints should be sent to Mr. Armstrong at 17402 Monica, Detroit 21, Michigan. A comprehensive analysis and appropriate comments will be returned with each print. Here is the best possible means of getting an unprejudiced evaluation of your photographic work, whether you are a beginner or have had more experience.

Pen Pals

There are many amateur photographers in foreign countries who desire to correspond with photographers of similar interests in the United States for the exchange of ideas, experiences, magazines, and other photographic information.

If you would be interested in finding a photographic pal in a foreign country, send your name and brief details of your activities and interests to Edward J. Hobbs, Director, PSA Pen Pals Service, 1673 Union Commerce Building, Cleveland 14, Ohio. There is no service charge for this activity.

In the United States photographic supplies and literature are plentiful, but in Europe both supplies and literature are at a premium. Exchange of information is doubly appreciated by our overseas photographic friends.

PSA Award of Merit

To give national recognition to those Pictorial Division members who have been successful in salon exhibition work, is the function of the PSA Award of Merit. Any PD member who has met the requirements of exhibition is eligible for this award.

The One-Star Exhibitor must have had 6 different pictures hung with a total of at least 30 acceptances in recognized salons. The Two-Star Exhibitor must have had 16 pictures hung with 80 acceptances; the Three-Star Exhibitor is required to have hung at least 32 different pictures and had 160 acceptances; while the Four-Star Exhibitor must have had 64 different pictures accepted and a total of 320 acceptances.

Star Exhibitors now have a special tab to be worn with their PSA pins, the various colors designating their rank. As announced in the July issue, these are available from the Director of the Award of Merit.

If you have had your work accepted in international exhibits, send your record to Warren W. Lewis, Director of the Award of Merit, 2053 North Sedgwick Street, Chicago 14, Illinois, to secure national recognition of your ability.

These are the various activities which are available to individual members of the Pictorial Division of PSA. Are you satisfied with your present photographic abilities and achievements? If so, I would hazard a guess that you have either gone to seed, photographically, or should be permanently about six feet under the normal level of the rest of us dissatisfied photographers.

If you are not satisfied with your present photographic abilities and achievements, you have at least gotten started toward attaining the degree of proficiency you desire because of your membership in the Pictorial Division of PSA. Now that you are a member—participate in as many activities as your time permits—get your money's worth. The activities are conducted for the benefit of Pictorial Division members—if you don't get your money's worth, you have only yourself to blame.



Dr. C. F. COCHRAN, Associate Editor

Once again we turn to the Pacific Coast for our PSA Portfolio Medal Award winner. This time it is Jason A. Hailey, 2544 W. 7th St., Los Angeles 5, Calif. Jason's print, "East Los Angeles," which had previously travelled in PSA Pictorial Portfolio No. 10 was accepted and hung in the 31st International Salon of the Camera Pictorialists of Los Angeles.

The winning picture was taken on a 4 x 5 Graphic View Camera, with an 8 1/2" Ektar lens. The exposure was 1/25 at f/8. It was taken on Isopan film developed in Ansco 17 for 9 minutes at 68° F. The print was made on Defender DL developed in D-55. The lighting was late afternoon rain with smog. Jason's shooting and processing are a variation of Ansel Adams' methods.

In writing about his picture Jason had said, in part:

A large percentage of my work is industrial photography. I have a lot of faith in the American way of life and economy. The strength of our great nation lies in its industrial economy. I am impressed by the structural bigness and gigantic force of industrial activity. This has an effective emotional quality and is a stimulant to my creative impulses.

For some time I had been looking for a suitable interpretative study of Los Angeles. Another photographer and I were returning from a photographic job on the east side of Los Angeles when this spectacular scene presented itself. Since I am from Florida this seemed like the logical solution to the problem of remaining true to the alma mater Chamber of Commerce of St. Petersburg. I felt sure that they would be pleased with this photograph.

This scene encompassed all the qualities that I had been searching for to effectively document Los Angeles—light afternoon rain, cloudy sky, smog atmosphere and vital industrial activity.

If you are eligible for the Portfolio Medal Award remember that the rules are

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EAST LOS ANGELES

Jason A. Hailey

simple. To qualify one must never have previously had a print accepted and hung in a recognized international salon. The first print to be thus accepted and hung must be one that has travelled or that is travelling in a PSA Pictorial Portfolio at the time of its submission to the salon.

When you qualify, merely advise the Director, E. R. Christhill, Hon. PSA. Do not advise Philadelphia.

There are more medals awaiting distribution so if you are eligible, why not try and win one.

Hints from the Notebooks

Sometime ago there appeared on a technical data sheet in PSA Pictorial Portfolio No. 14 under "development" the simple statement, "Shipman's Divided Developer." The quality of the print was such that members of the circle asked the maker of the print, E. V. Wilcox, for an explanation of what was meant by Divided Developer. This was later given in the notebook and the method was tried by other members of the circle. In the belief that it will be of general interest to portfolio members we are quoting from the notebook entry of E. V. Wilcox of Scotland, S. D.

"The plan of divided development as devised by Mr. Charles H. Shipman of Cleveland, is one in which the developing agents and alkali are separate solutions. The film is placed first in the solution of agents (#1) and then after draining well but without rinsing, it is put into the alkali solution (#2). In #1 the gelatine absorbs just so much of the solution and no more, depending upon its strength. When the film is placed in #2 the development starts and continues until the agents are exhausted and development automati-

cally stops, a complete action no matter how long the film is left in the solution.

"If #1 is of proper strength, the highlights will stop development before they arrive at the density allowed by the exposure since the developing agents have become exhausted by that time. The shadows, however, have more absorption and so develop to the limit allowed by the exposure. In this way the shadows have the best possible detail without blocking the highlights. The photographer may thus keep the contrast within the range of the paper he wishes to use, no matter if the subject be contrasty or the exposure faulty. We have made a correctly exposed flash of a child in white at a distance of about five feet, with stop at $f/32$ and another of the same with the lens wide open. The films were developed together and both made equally good prints on the same grade of portrait paper, even though one was very dense from great over-exposure.

"The strength of the #1 solution governs contrast of negative, while the exposure governs density. This allows the photographer to produce the type of negative that he likes best. Increase the water in #1 for softness and decrease exposures for thin negatives. Uniformity is easy to obtain.

"Gelatine absorbs all of the solution it is going to in about 45 seconds at temperatures between 70 and 85 degrees, so that a minute in #1 is sufficient. In #2 the alkali is strong enough to complete development also in one minute when the development automatically stops and more time is useless. Temperatures above 70 degrees are of no importance since warm solutions only hasten the completion of development. Colder solutions may slow action so that finality is not reached until after one minute's time. We have developed two similarly exposed negatives one at 70° and the other at 100° with practically no dif-

ference in result. Agitation too is not important as it is with mixed developers.

"These solutions may be used over and over. Since no action takes place in #1, it does not decrease in strength so if the volume is kept up it may be used for many months. #2 removes the dye in the film so becomes very much discolored, but this does no harm whatsoever and the solutions will work perfectly until the alkali weakens. There must be no contamination of alkali in #1. It is well to filter both solutions occasionally.

"For fine grain development borax is substituted for carbonate as an alkali and the development time increased to three minutes. We have found borax somewhat unstable so it should be mixed more often. The use of Divided Developer in making copies with very short exposure is not recommended. It may be used for making prints, but in this case the timing in #1 must be accurate as paper absorbs far more solution than film, so the results are less uniform."

Mr. Wilcox gave the formulas for Shipman's Divided Developer as follows:

Solution #1	
Water—110°	28 ozs.
Metal	93 grains
Sodium Sulfite—dry	500 grains
Hydroquinone	95 grains
Potassium Bromide	50 grains
Water to make	32 ozs.

Solution #2	
Water—110°	28 ozs.
Sodium Carbonate—dry	1500 grains
Water to make	32 ozs.

Solution #3 (Fine Grain)	
Water—110°	28 ozs.
Borax powdered	800 ozs.
Water to make	32 ozs.

Summary:

For general use the procedure is:

Solution #1 1 minute

Drain but do not rinse

Solution #2 1 minute

Rinse

Fixing Bath

Wash

For Fine Grain Development:

Solution #1 1 minute

Drain but do not rinse

Solution #3 3 minutes

Rinse

Fixing Bath

Wash

News Flash!

The temptation was to work out an elaborate pun on the heading, "News Flash," but perhaps we should just let you spin your own jokes. The news concerns PSA Photo-Journalism Portfolio No. 1. The commentator has been announced.

The flash part of the pun was to involve the famous authority on flash, Rus Arnold, AFSA. Rus is the new commentator.

Perhaps it would be simpler all around simply to state that we take pride in announcing that the commentator on PSA Photo-Journalism Portfolio No. 1 will be Rus Arnold, AFSA. This simple statement tells much.

DEFINITION: Art is lying in such a manner as to seem to tell the truth.—RUS ARNOLD, AFSA.

Portfolios and Great Falls CC

The Great Falls Camera Club was organized in the spring of 1946 by 11 photo enthusiasts. Like all new or small clubs, we had trouble finding suitable material to put on interesting programs at our meetings. Chancing upon a small notice, in one of the photographic magazines, about the Photographic Society of America and the portfolios, we wrote to Mr. Christhill and he sent us complete information regarding the activities of PSA. Since then, we have made continued use of the services of the PSA and are proud to state that of the total PSA membership in the state of Montana, over 50% are members of the Great Falls CC.

As a result of the experience gained through our affiliation with the PSA, we have conducted four international salons, which have been very successful, and plans are now being made for our 5th Salon to be exhibited in March 1951. We also conduct the State Photographic Salon, held each year in connection with the North Montana State Fair. The club meets twice monthly, conducts monthly competitions for its members for both monochrome prints and color slides, and in cooperation with other clubs in the state, conducts a State Photographic Portfolio.

In 1949, the PSA members of the club formed the Great Falls PSA Photo Portfolio Division. These members get together when a member's portfolio arrives and hold enthusiastic sessions. Also, whenever possible, the portfolios are displayed at regular club meetings. While the Great Falls CC is the youngest in the state, we feel that it is through our connection with the PSA and the American Portfolios that we are fast becoming the leader of the camera clubs in Montana.

PSA Portrait Portfolios

PAUL J. WOLFE, Associate Editor

A congratulatory hand to Carl N. Sanchez, Jr. for his excellent criticisms in Portrait Portfolio No. 3. Not only does he point out the faults for each member but offers ways and means to correct for improvement. That makes for good commenting. Regarding outdoor portraiture Carl says to Everett R. Tomlinson of Batavia, N. Y.: "Portraits outdoors are more easily handled in a very faint or hazy sun, eye squinting being reduced. Even late sun, not diffused, is still difficult. Or, with bright sun for backlighting and a reflector to the front some very delightful effects may be had."

Don E. Haasch of Boise, Idaho on the subject of child photography draws this important advice from Carl N. Sanchez, Jr.: "A lovely child should be portrayed for just what she is, with simple lighting. It is important to think of your lighting set up in terms of, and in harmony with the character of your subject. I should like to caution against too many lights."

Start with one key light, move it



Members attending the May meeting of the Great Falls PSA Photo Portfolio Division discussing Portfolio #30, reading from left to right, and their portfolio numbers, are: Mrs. Mabel Moran, #37; Tony Lopuch, #36; Charles DeArmond, #34; Carlton L. Lingwall, #24 and #39; Ted Carr, #52; Miss Elwis Cahalan (unassigned); and Jack Nabrigane, #25.

around in a semi-circle front, fairly high, until you have the desired effect for your model's features. Then move the fill-in light up so as to lighten the shadows. This simple lighting can be productive of much fine work. A spot may be added to catch up the hair or background if you like."

Several Commentators have suggested that the makers of portraits in the portfolios include this information in the data regarding film, time and temperature of development, amount of agitation, and the dilution of developer. This same information is desired for prints. Next round add this to your portfolio print data sheet if you are not already doing so.

Keep an eye on "Portrait Pointers," the quarterly publication edited by Maurice H. Louis. He has many excellent writers lined up for comments on portraiture. Non-portfolio members may secure copies by sending 50¢ to Maurice H. Louis, 333 West 56 St., New York 19, N. Y. "Portrait Pointers" will be mailed for one year at this fee.

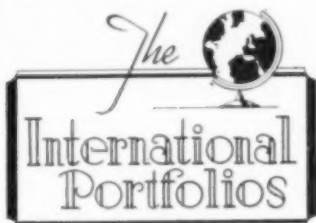
Cecil B. Atwater, emergency commentator for Portfolio No. 1 says: "I seldom find a negative that is suited to the texture screens and think that pictures of beautiful women and especially children are ill adapted to their use. The moment you strive for flesh tones you get a muddy rendition."

Says Mr. Atwater to Joe L. Taylor, Jr., in Portrait Portfolio No. 1: "You are in pretty fast company in this portrait portfolio, which is all to your advantage. I don't know how you could learn more than you will absorb from membership in this circle." Truer words were never spoken. In No. 1 you will meet Doris Martha Weber, Axel Rohnsen, Edith Royky and others rising to salon stardom. You will also find Allan Hoxvath, now acting as Commentator.

Waited: A sure fire method that will keep the portrait portfolios on schedule. There are a lot of gripes in the notebooks, and justly so, about the many delays. As an example No. 7 was sent out by its secretary November 22, 1949. It did not

get back to him until June 25, 1950. Two persons in that group failed in their part. Is there a solution? This director would certainly like your help in keeping the portfolios on schedule. If any of you know of a system that might work better than what we already have, please write me.

Pictorial Division members are invited to join our Portrait Portfolios. Write Paul J. Wolfe, Director Portrait Portfolios, 124 E. Jefferson St., Butler, Pa.



DR. WILLIAM F. SMALL, Associate Editor

Modern Portraiture— A Bad Habit

J. W. CHAPMAN-TAYLOR

Miss Edith M. Royky in a charming letter reminds me that I made the above statement in a previous round of the Australasian-American Portfolio. Her request for this article in substantiation of my wild words is, I suspect, something of a challenge. Good! I welcome the opportunity. I can only touch the fringe in a short article, however, readers please remember.

The Bad Habit. In club competitions, in the show cases of portrait photographers, and exhibited in the salons I find the same stereotyped handling of portraits. Always the "Large Head," it may be with some

AN INVITATION

This is an invitation to every PSA member to participate in the PSA American Portfolios.

Enrollments are now being received in the following specialized groups:

- PSA Pictorial Portfolios
- PSA Portrait Portfolios
- PSA Miniature Portfolios
- PSA Control Process Portfolios
- PSA Star Exhibitor Portfolios
- (For PSA Award of Merit Winners)
- PSA Nature Portfolios
- PSA Photo-Journalism Portfolios

For information concerning any of the foregoing activities and for enrollment blanks, write to the Director of the PSA American Portfolios, Eldridge R. Christhill, Hon. PSA, APSA, Suite 406, 800 Davis Street, Evanston, Illinois.

neck showing or it may be with clipped ears and hair or chin. Always the same putty-white toneless flesh and a spot light beam burning off one ear and a patch of hair on one side. Or perhaps the photographer has achieved the other banality of "Skin Texture," and emphasized every pore, as if that is of any importance in the portrayal of a fellow human! Why, skin texture is the very least important thing about him. Clear definition of every detail may be the lensman's dream but it is the death of art.

These Maps of Faces start in one corner and lean over to the opposite one, and behind there is *nothingness*. They are presented like some magnified water-beetle isolated for scientific study and dissection. Do we ever see people as huge heads a few inches from our eyes with nothing behind them? Do we ever see them under a light "that never was on land or sea" but only in some stunt-drunk photographer's imagination?

All this is the refuge of the destitute in ideas, the bankrupt in art-knowledge and in the appreciation of real values that tell us what is worth knowing about the sitter. So deeply has this habit become ingrained that even the judges of great salons fail to appreciate its shallow superficiality or perhaps are deceived by the excellent technique which sometimes accompanies it.

Of course, there are variations of the above but by and large I have described modern portraiture. The limitations and dangerous possibilities of electric light, the ease with which a superficial technique can be acquired, and the immense, though ignorant, public demand explains, but does not justify, the degradation into which portraiture has fallen at the hands of equally ignorant photographers.

How It Is Done: Grandmother yielding

PSA International Portfolios

There are openings in the following PSA International Portfolios for Pictorial Division members who are interested in interchanging prints for comment and analysis with the leading photographers in foreign countries:

Anglo-American
Canadian-American
India-American
Australasian-American
Cuban-American
French-American
Swedish-American
South African-American
Brazilian-American
Belgian-American
Chinese-American
Netherlands-American
Dominican-American
International Medical Portfolios
Costa Rican-American
Caribbean-American
International Control Process Portfolios

For information, write to the Director of PSA International Portfolios, Miss Jane J. Shaffer, 5466 Clemens, St. Louis, Missouri.

to insistent demands from children and grandchildren has come for her portrait. The cameraman sets her in front of his sheet of wall-board, turns on his battery of lights and shoots her head off. The negative is retouched as smooth as a bride of 25, the old firm mouth is re-modeled into a cupid's bow, the lines of character built up by hardship, sorrow and battling with the world and caring for a family are taken out, and so on and on. This ridiculous final "portrait" has nothing left in it that really mattered. The *spiritual values*, her interests in life, her value to others, her material background, all the workings of her inner being are missing and all we have is a falsified outer surface of her head. One might as well paint the Madonna without the Child.

How It Should Be Done: We will put the old lady in her big wicker chair, in her own bay window, her prize shawl over her shoulders; her grandchild's torn pants in her lap. The soft broad dignified daylight plays around her, losing and finding her contours among the shadows, and flashing off scissors and buttons, her big old comb and brooch.

"A figure in colour and design

Like these of Rembrandt of the Rhine
Half darkness and half light." *

A fifth of a second with a slightly soft focus lens and we shall have a picture in the spirit of the old Dutch painters whose skill in portraiture has never been excelled. This picture of a brave old woman who has faced up to life and now, in her serene old age, can still be useful as she sits in her own home setting will have the timeless values which make a picture as well as a portrait.

Listen Again: Shown through the premises of a leading portraitist, we came out of his hideous Taking Room with its beloved plain white background, boom lights and cables snaking about, into the reception room again. With relief I noted its nice furniture and some good oil paintings, the charming receptionist sitting at the desk. "How nice she looks," I said, "this is where you should take your sitters. Here they would at least look like people who lived in our world. In your Taking Room they become just *specimens—genus Homo*, female, age marriageable!"

The receptionist's dancing eyes urged me on, so I said, "Sargent, Whistler, the great Dutch painters, and in our own day, men like Russell Flint, they show us what portraiture can and should be. Emotion, mystery, romance lurk in their shadows, they know the value of the 'half-seen' Art is in suggestion, not in bald definition." When you can make your lens see like this you will be out of a bad habit.

Yes! I know the photographer must pay his rent, but it was photographers who made the bad habit. The public didn't ask for it and in fact don't want it. They take what they can get. It is up to us photographers.

* Longfellow—"A Dutch Picture."

Wellington, New Zealand

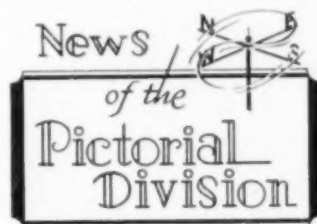
DEAR MISS ROYKVY:

So nice to get your interesting letter and I am glad you like the article. Mine has been a "Voice crying in the Wilderness" all my life, (I was born on John Baptist Day) and perhaps that has something to do with it! Well, there may be someone who will take heed, for photography is really worthy of our best, and should not be stepped down to where art is completely absent.

I have been a designer and builder of houses, designed and carried out in the spirit of the old English cottage. I am also an enthusiastic photographer.

My old 1930 Model A Ford has done all my travelling for 20 years and is still going strong. I call it "Ole Man River" because it "Jus keeps rolling along." We have camped with it, taken the whole family, tent, bedding and cooking gear for weeks. On one job in the country, I slept in it for six months as the men filled the shed we had. I pulled several houses up hills with it (half a ton at a time) when the ground was so steep the merchants could not deliver off the road. And still it takes me out and brings me back home, almost without steering, and runs itself into the garage.

J. W. CHAPMAN-TAYLOR



MISS CHARLOTTE KESSLER, Associate Editor

Would you like printed salon labels to stick on the back of your prints when you send them out into the cruel, cold world? Doris Martha Weber, APSA, Director of Art, has designed such a label for you and they are now ready for distribution. The labels bear the Pictorial Division eagle, and have spaces for print title, number, and other necessary information.

To secure a supply of these for your own use, just send a 3¢ stamp to Lewis T. Reed, Secretary-Treasurer, 7836 Luella Avenue, Chicago 49, Illinois.

Star Exhibitors

New PSA Star Exhibitors and advances in rating since the last published listing are as follows:

New 1-Star Exhibitors

Antonio Marti V., Santiago, Chili
Jose Julio Nieto E., Santiago, Chili

New 2-Star Exhibitors

Martin K. Bovey, Jr., Concord, Mass.

Advanced from 2-Star to 3-Star
Theodore L. Bronson, New York, N. Y.

Advanced from 4-Star to 4-Star
Kanti Patel, Bombay, India

Applications for Star Exhibitor Award of Merit Certificates should be addressed to Warren W. Lewis, Director of the Award of Merit, 2055 N. Sedgwick Street, Chicago 14, Illinois.

Salon Questionnaire

RALPH L. MAHON, APSA

For the past three months, we have summarized the combined opinion of representative salon chairmen and exhibitors regarding controversial matters affecting salon finances and entry fees, salon dates and time intervals, and juries and judging procedure. This month, we shall discuss salon catalogues and the actual exhibition of accepted prints.

All statements made represent the consensus of 23 salon chairmen and 30 exhibitors located in widely scattered areas of North America and are believed to be representative of current thinking on this subject. The information was secured from a five-page questionnaire mailed in December 1949 to 33 salon chairmen and 45 exhibitors located in United States, Cuba, Mexico and Canada.

Catalogue

In answer to the question, "How many prints do you ordinarily select for catalogue reproduction, eight of 23 chairmen indicated 8 to 10. Four selected 6 to 8, four 4 to 6, with three selecting over 10 and three, none. Fourteen followed a definite method in the process. Most consider suitability for engraving, diversified subject matter and the selection of prints not previously reproduced. Similarly, most make their selections from prints receiving the unanimous approval of the jury on the first round. Opinion appeared about evenly divided on jury versus committee selection.

Thirteen of the chairmen had never considered reducing or eliminating the number of cuts used because they believe reproductions go a long way toward making a good catalogue. As long as they can finance a good catalogue by advertising or other monetary assistance, they propose to continue cuts with their accustomed frequency or to further increase them. Others believe contributors like good catalogues and will continue to patronize salons which provide this tangible return for their entry fee. Six chairmen had considered and several had made reductions in the number of catalogue cuts.

In answer to the question, "Are you satisfied with salon catalogues which do not carry reproductions of accepted prints?", 11 gave an unqualified "yes." Three gave a qualified "yes," in approving such catalogues for small shows or by an indefinite "sometimes." Ten were definitely not satisfied with catalogues without pictures, one even suggesting that committees make a charge for catalogues if necessary to continue reproductions. With respect to the use of inexpensive paper for catalogue purposes, 11 gave their unqualified "yes" and the same number an unqualified "no."

Six gave a qualified "yes," as long as the paper used gives fair reproductions and does not result in "shabbiness." Fourteen out of 30 gave an unqualified "no" to the suggestion that the catalogue be reduced to a simple list printed by offset to keep the entry fee at \$1.00. Ten approved this procedure and four others gave it a qualified "yes," although it was evident from the additional comments of the latter group that they were not really satisfied.

Exhibition of Accepted Prints

Fourteen salon chairmen (out of 23) stated that they hang their prints under glass. Most of those not following this procedure involved small salons. Eight of the salons represented used illumination equivalent to that used at the judging, while eight more attempted to use equivalent illumination. The others found it impossible to match the judging illumination. This applied especially to those using the standard light box for judging. All but two salons arranged or rearranged the prints on exhibition to provide interesting variety.

Twenty-one of 30 exhibitors endeavor to see several photographic shows during their exhibition period. Seven others attempt to attend the local show or shows. Suggestions to salon committees included more and better care of prints, better gallery lighting, more publicity to attract public attention including gallery talks, the use of more local jurors, more attention to subject matter in hanging, have salon catalogue available at opening, etc. Distance and business reasons were the chief reasons why all exhibitors do not attend photographic shows.

Next month, we shall discuss broad salon practice procedures and numerous general suggestions received from chairmen and exhibitors.



Camera Club Print Circuits

Has your club made arrangements to participate in these very valuable print circuits which were described last month? The third of these circuits is ready to start its rounds.

Mr. M. E. Walker, Exhibition Chairman of the Egyptian Camera Club at Centralia, Illinois, one of the clubs participating in Circuit 30R, wrote the following comment on this activity to William R. Hutchinson, Director of the Print Circuits:

"The print circuit our club participated in was enjoyed very much by the members at a recent meeting.

"I believe that with the comments by



Spring Exhibition of the Lincoln Portfolio Camera Club during the week of May 22nd, 1950, Lincoln, Nebraska.

Mr. Reynolds and the other camera clubs, our club as a whole will have learned a lot about making salon prints.

"We would again like to participate in another circuit when this one is finished."

Need we say more about the value of this activity? Write to William R. Hutchinson, Director, PSA Camera Club Print Circuits, for full information.

Portfolio Camera Clubs

One of the projects to be undertaken by all Portfolio Camera Clubs is the presentation of an exhibition of their work each year. The Lincoln (Nebraska) Portfolio Camera Club presented their exhibition recently. Clarence R. Freeborn, President of this group, wrote to the director of this activity and enclosed the picture of their display:

"The Lincoln Portfolio Camera Club held an exhibition of their work during the week of May 22. This exhibit consisted of 50 prints selected by local judges who made selections from prints receiving first, second and third ratings in the club's monthly print competitions.

"The exhibit was placed in a standard display window of one of Lincoln's large department stores and was viewed by thousands of people passing along the busy street at this location.

"A mounted roster of the club's membership, together with the PSA emblem was also displayed.

"The club is fortunate in having as a member the manager of the Camera Department of this store, and he played a major part in arranging for the showing. The fine cooperation of Gold & Co. is highly appreciated.

"One of the finest tributes came from the advertising manager of the firm, who stated had he known in advance the high quality of our prints, he would have assigned them a preferred location in a corner window."

Members of the Lincoln Portfolio Camera Club who had pictures in the Exhibit were Bernard Anderson, Howard T. Anderson, Sten T. Anderson, Robert Cornell, Clarence R. Freeborn, Chester R. Frey, Edwin A. Grone, Richard Knott, John W. Luebs, and Stanley D. Sobel.

There are Portfolio Camera Clubs operating in Austin, Minn., Owatonna, Minn., Rochester, Minn., Great Falls, Mont., Lincoln, Neb., and Sioux City, Iowa, at the present time. There are also several very promising prospective clubs in other cities, and the Director of this activity is hoping

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to interest portfolio members in most of the other states in this additional and valuable activity.

If you are interested in information about the formation of a Portfolio Camera Club in your locality, contact Sten T. Anderson, APSA, Director.

Coming Salons Agreeing to Follow PSA Recommendations

NOTE: Prints, M—monochrome; C—color; S—nature; A—architecture; S—scientific; R—record; Transparencies, T—color; SS—stereo slides; NT—nature; L—monochrome; ST—scientific; MP—motion picture films. Entry fee: \$1.00 in each class unless otherwise specified. Recognition: The monochrome portions of salons listed in the first section have Fictorial Division approval. Check salon list of appropriate division for recognition of other sections.

Oklahoma (M.C.) Closes Sept. 11. Exhibited Sept. 24-30 at Oklahoma State Fair, Data: Lonnie A. McPherson, 1919 NW 20th St., Oklahoma City 6, Okla.

Milwaukee (M.T.S.S.) M. closes Sept. 14. Slides, Sept. 21. Exhibited Sept. 28 to Oct. 12 at Layton Art Gallery, Data: Elmer J. Cusick, 1126 E. Pleasant St., Milwaukee 2, Wis.

PSA (M.C.T.N.T.) and **MP** Closes Sept. 16. Prints exhibited Oct. 18-Nov. 1 at Baltimore Museum of Art, Slides projected at Museum Oct. 18; Slides and motion pictures projected at convention hotels, Oct. 18-21. Fees, \$2.00 for prints; \$1.00 for transparencies; MP \$1.00-\$4.00 according to length. Data: Ernest C. North, 6309 Frederick Rd., Baltimore 28, Md.

Pasadena (M.T.) Closes Sept. 30. Exhibited Oct. 9-19 at Bullock-Pasadena, Data: Danne McKeever, 401 S. Lake Ave., Pasadena 5, Calif.

Victoria (M.T.) Closes Oct. 5. Exhibited Nov. 5-12 at Empress Hotel, Data: Irvine Dawson, 650 Victoria Ave., Victoria, B.C., Canada.

Chicago (M.T.) Closes Oct. 7. Exhibited Oct. 28 to Nov. 26 at Museum of Science and Industry, Data: Mrs. Loren M. Root, Room 2520, 133 S. LaSalle St., Chicago 1, Illinois.

Escondido (M.T.) Closes Oct. 8. Exhibited Oct. 22 to Nov. 4 at Fine Arts Camera Club, Data: Richard A. Levi, 1465 E. Park Drive, Escondido 11, Ind.

Columbus (M.C.T.) Closes Oct. 9. Exhibited Oct. 22 through Nov. 4. Data: Fred H. Bradlin, 436 Elmore St., Columbus 6, Ohio.

Santiago (M.T.) Closes Oct. 19. Exhibited Nov. 7 to Dec. 8 at Palacio de la Alameda. Entry forms from R. L. Mahon, 260 Forest Ave., Elmhurst, Ill. Data: Club Fotografico de Chile, Huertano 1223-2, Pisco, Santiago, Chile.

Min. Valley (M.C.T.) Closes Oct. 25. M and C exhibited Nov. 5-20 at City Art Museum, T. Nov. 6 and 13 at Museum and Nov. 1 at Calhoun Branch Library, Data: Noel F. Deloitte, 186 Stratford Ave., St. Louis 5, Mo.

Des Moines (M.C.) Closes Dec. 9. Entry fee \$2.00. Exhibited Jan. 1-21 at YMCA and Art Center, Data: Rodney Q. Selby, YMCA Building, Des Moines, Iowa.

Detroit (M.T.) Closes Dec. 12. Exhibited Jan. 14 to Feb. 4. Data: Dr. Paul Ayres, 18723 Monroe, Detroit 24, Mich.

Other Overseas Salons

Zaragoza (M.) Closes Sept. 15. Exhibited Oct. 5-23. Entry fee to American Pub. Co., 607 Guardian Bldg., St. Paul 1, Minn. Data: Secretary, Sociedad Fotografica de Zaragoza, Plaza de San 7 Barrios, Zaragoza, Spain.

New Zealand (M.T.) Closes Sept. 18. Exhibited Oct. 21 to Nov. 18 at Art Gallery, Christchurch, and subsequent until May 1951 throughout New Zealand. Data: R. J. Blackhouse, P. O. Box 880, Christchurch, New Zealand.

Windsorham (M.T. or L.) Closes Sept. 21. Exhibited at Camberley, Surrey, Oct. 13-29. Data: Secy., Windsorham Camera Club, Hailgrove, Basingstoke, Surrey, England.

Japan (M.C.) Closes Sept. 30. Exhibited at Tokyo, Osaka, Nagoya and Fukuoka beginning Oct. 13. Data: Int'l. Photographic Salon, The Asahi Shinbun, Yarakuchu, Tokyo, Japan.

Lucknow (M.C.T.) Closes Dec. 15. Exhibited Feb-Mar. 1951. Data: Secy., U.P. Amateur Photographic Assn., 16 Cantonment Rd., Lucknow, India.



By KARL A. BAUMGAERTEL, APSA
353-31st Avenue, San Francisco, Calif.

This issue of PSA JOURNAL carries with it the first color supplement, a supplement we feel every Color Division member can be proud of, because it is a cooperative project of the whole Division. While we think that the supplement will speak for itself and that no praise on our part is necessary, we do feel that one little suggestion will be both pertinent and helpful. Read every article whether or not the subject seems to be of interest at first glance.

The reason is that almost all of the articles contain matters of general interest even if the titles suggest only limited appeal. As an example, refer to the article, "Your Club Needs A Color Course" by Charles Kinsley and John Mulder. At first glance this would appear to be of interest to clubs only, but actually, in outlining a color course, the writers have quoted so many examples of what such a course should include that the article itself is almost a course in color photography. Certainly, it carries in itself more good advice applicable to individuals than do many articles written specifically for individuals. Many of the other articles submitted carry the same multiple interest—READ THEM ALL.

Courtesy

It has always seemed strange that in an avocation such as ours, that by its very nature attracts the kind of people that are fully aware of the social amenities, one finds such a great lack of common courtesy towards judges and speakers in camera clubs. We know that much of the difficulty many clubs have in getting judges and speakers is caused by nothing more than lack of courtesy.

As most photographic groups cannot pay guest commentators in money, except perhaps a few dollars to cover actual expenses, it seems doubly important that every other possible consideration be shown. Unfortunately, this is seldom the case and from hundreds of contacts with well known photographic authorities, who have given thousands of hours of valuable time freely to camera clubs, the lack of proper consideration and courtesy plus the apparent lack of appreciation after the program, has been responsible for the reluctance on the part of many speakers to accept invitations.

One discourtesy often shown speakers is the habit of waiting until the last minute and then phoning the speaker a few days before the meeting, putting pressure on the commentator by means of a hard luck story, which is in most cases a lot of nonsense made necessary only by procrastination on the part of the program chairman. Actually the speaker should be contacted at least 30 to 45 days in advance, not only to give the judge proper notice but also to permit advance notice being given club members to insure the speaker

an audience worthy of his talents and to build up attendance at meetings. A good speaker or judge is one of the most interesting program features a club can present. It adds much to the prestige of the organization, and it also adds greatly to the personal prestige of the program chairman, which most of them do not seem to realize.

Most program chairmen fail to provide themselves with sufficient information so that they can properly introduce the speaker to the audience. In most cases they do little more than say: "I'm pleased to present our speaker John Mumble-mumble and a couple of more mumbles" which is neither pleasing to the audience or fair to the commentator. What should be done, when arrangements are first being made, is to ask the speaker to give some information about himself for advance publicity and to permit properly introducing him to the audience. There is no reason why you cannot ask "What shall we say in our advance notice and how shall we introduce you to the audience?" Experienced speakers will welcome such an opportunity, and if some less experienced speaker is hesitant about answering, you have done your part.

If the activity scheduled happens to be the judging of a club competition, many committee chairmen neglect to tell the judge how the judging is to be done. Almost every club has its own system of judging. What happens is this—the judge is introduced and is allowed to stand there without instruction. What follows is usually a silence embarrassing to everyone. What should happen is the judge should be properly introduced, he should be told in the presence of the audience exactly how the judging is handled and what is wanted, and he should then be invited to proceed. If by chance the club has no regular system of judging, the judge should be told what is wanted, how many awards, etc., and should be asked if he has any method of his own he prefers to use. If the answer is no then the committee chairman should have a method ready to suggest.

Another discourtesy, not so prevalent now as it was some years ago, is heckling. No good commentator ever objects to answering reasonable questions. In fact for the most part questions are usually welcomed as they often add interest to the talk. It should be remembered, however, that in much of photography acceptable results can be secured by widely different methods, and to force a speaker to justify his methods in comparison with the methods used by some previous speaker is not being reasonable and certainly not courteous. Each speaker must be judged individually and each speaker's comments must be evaluated by the results he secures in his own work and by their possible application to the problems of the individual listener.

Finally, and this is where 95 per cent of the clubs fall down, a speaker or judge should be properly thanked not only just after he has finished speaking but also by means of a letter written soon after. In addition, if the club has a regular publication, something complimentary should be said in the first issue following the pro-

gram. Copies of the issue carrying the write-up and of any issue that may have carried an announcement of the program prior to its being given should be sent to the speaker. Try treating your judges and speakers as you would guests in your own home and watch your treatment pay dividends in better programs.

Changes

It has always been the policy of the Color Division to keep charges on its activities at a minimum, and for some time all activities for individual Color Division members have been without charge except for possible postage to the next participant in the project. In line with this policy we can now announce that since July 1st, the reservation fee charged Color Division member clubs on Exhibition Slide Sets has been eliminated. PSA member clubs not specifically Color Division members still have to pay the actual cost and non PSA clubs are served on a cost-plus basis. The removal of this charge as far as Color Division member clubs is concerned means that with one exception all club activities are free to CD member clubs. The exception is the National Club Slide Competitions on which an entry fee is charged to help pay for the many fine plaques, medals and other awards given, the value of which at least equals the entry fees collected.

The second change to be reported this month is in the chairmanship of the Honors Recommendation Committee. At the request of Brad McKee, he is being relieved of the chairmanship and Paul J. Wolf is appointed Chairman of the committee in McKee's place. There are no other changes in the committee, Brad still serving as a regular member. About next December, if you know of some Color Division member whom you feel has deserved one of the honors granted by the Society, contact Paul J. Wolf at 554 Fort Washington Avenue, Hawthorne, N. Y. and he will be glad to advise how to proceed, and if the candidate is worthy will see to it that he receives the Color Division's recommendation along with those of the sponsors.

Exhibition Notes

Among the numerous entry blanks received for coming color slide exhibitions there are two the writer feels deserve special commendation. One is the "Columbus International Exhibition of Photography and First Bexley International Color Slide Exhibit" which includes in its program one of our favorite projects, the showing of the exhibition in at least one and possibly more Veterans Administration Hospitals, a definite showing being arranged for the hospital at Chillicothe, Ohio and others planned for Dayton, etc. Other features will include a well illustrated catalog with many slides reproduced in monochrome and the cuts being given to PSA JOURNAL. For an entry blank write Fred H. Braundlin, 456 Elmore St., Columbus 6, Ohio. Closes October 9th.

The other show that we think deserves special credit is the Mississippi Valley

show at St. Louis which has joined the list of exhibitions furnishing the little wooden slide shippers we like so well. Closes October 25th. Write Noel F. Delaporte, 586 Stratford Ave., St. Louis, Missouri.

There are, of course, many other shows that deserve a lot of credit. These will be found listed below in our calendar of exhibitions that has been so ably prepared by H. J. Johnson, APSA, for many years.

Help Offered

Color Division member Karl Freund, APSA, President of the Photo Research Corp., 127 W. Alameda Ave., Burbank, California sends us a letter from which we are pleased to quote. Mr. Freund says:

"Having done considerable research on color temperature and filters as well as allied subjects, I hope you will feel free to direct the members of the Color Division to call on me for any information, or submit any problems they may have in color—I shall be very happy to do everything possible to help them."

Mr. Freund deserves thanks for his kind offer and we hope our members will take advantage of it.

Coming Color Exhibitions

Columbus, Sept. 16-17. Deadline Sept. 11. Four slides, any size. \$1. Forms: Fred Tietzel, Box 5016, Univ. St., Columbus, Ohio.
PSA, Oct. 18-21. Deadline Sept. 18. Four slides, any size. \$1. Forms: Ernest C. North, 6700 Frederick Rd., Baltimore 28, Md.
Missoula, Sept. 28-Oct. 12. Deadline Sept. 21. Four slides, \$1. Also stereo division, four slides, \$1. Forms: E. J. Cusick, 1125 E. Pleasant, Milwaukee 2, Wis.
Tulsa, Oct. 18-17. Deadline Sept. 31. Four slides, \$1. Forms: Joe E. Kennedy, 1029 Kennedy Bldg., Tulsa 3, Okla.
1st Bexley (Ohio), Oct. 22-29. Deadline Oct. 9. Four slides, \$1. Forms: Fred H. Braundlin, 456 Elmore St., Columbus 6, Ohio.
Mississippi Valley, Nov. 1-13. Deadline Oct. 25. Four slides (up to 3 1/2 x 4 1/2). \$1. Forms: Noel F. Delaporte, 586 Stratford Ave., St. Louis 5, Mo.
Chicago, Nov. 9-17. Deadline Oct. 21. Four slides (up to 3 1/2 x 4 1/2). \$1. Forms: Russell Kerwin, 4940 Byron St., Chicago 41, Ill.
Cuba, deadline Nov. 13. Details later.
Minneapolis, Feb. 13-14. Deadline Jan. 22. Forms: Warren Anderson, 123 S. 7th St., Minneapolis, Minn.



OPUS 301

Jean Elwell

1948 Place Winner in First Contest



By H. J. JOHNSON, APSA
1614 West Adams St., Chicago 12, Ill.

Camera Club Mail

A few months ago an item appeared in this column regarding the large percentage of clubs which are, shall we say, somewhat careless about replying to mail sent them. These comments brought to mind our experiences in corresponding (or rather, attempting to correspond) with over 100 camera clubs over a period of a year or more. In view of the nature of our correspondence, the results were disappointing, and we were moved to determine, if possible, from the material at hand what the reason for this lack of replies might be. One fact developed from this analysis, and has stood the test of several months observation. It is noted here as a possible solution for part of the problem of handling camera club correspondence.

At first our analytical efforts were directed at attempting to determine a possible relationship between the clubs which answered their mail, and those which did not, and the geographic location, size of town or city, size of club, relative "age" of club, etc. All this failed to yield any correlation. Finally, however, the fact clearly stood out that the clubs which receive their mail at a club P. O. Box address had an almost perfect record of replies! This was in sharp contrast to the shamefully low percentage of acknowledgements from clubs receiving mail in care of some officer or ex-officer.

Whether or not our analysis is correct, the fact still remains that a P. O. Box address is a more permanent affair than the list of camera club officers, which changes annually—or sometimes oftener. Furthermore, mail delivered directly into the hands of the person for whom it is intended is more likely to be handled, let alone more promptly. How much less effort is required merely for the old officer(s) to hand over the P. O. Box key(s) to the new officer(s), than to get out a change of address to all and sundry concerned? Publication of the PSA Directory in the May issue of PSA JOURNAL does not (and can not) coincide with the elections of camera clubs the country over, even if the club remembered to notify PSA.

It is not intended to convey the impression that the only efficient clubs are those having their own P. O. Boxes, or vice versa. Far from it! Even if the mail is picked up regularly, someone still has to prepare an answer and mail it. —C. L. HIGDON

Club Competition Winners

Both the print and slide competitions for clubs last season had 80 participating clubs. There were large "B" classes, with numerous promotions into "A" class for the coming season.

In the slide competition, the following clubs were moved up: Edison (Chicago), Padre Trails, Owego, Stamford, Hawaii

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Color, Keene, Bell (Denver), Toronto, Germantown, and Cleveland Women.

In the print competition, the following were promoted: Oakland, Club Fotografico de Cuba, China Photo, Tulsa, Lawson, Jackson Park, and Delta.

Channel City and Oakland were season winners in the print competition, while Venango and Edison took top places in slides.

In the slide competition, Elmer R. Johnson (Springfield Pho. Soc.), J. S. Darling (Chicago Color), R. N. Johnson (Detroit Pho. Guild), Velma Tueller (Salt Lake Chromites), L. H. Hart (Salt Lake Photochrome), and Ted Rokor (Pasadena) were grand award individual winners. Corresponding winners in prints were J. E. Armstrong (Detroit Pho. Guild), Boris Dobro (Channel City), LaVerne Bovair (Detroit Pho. Guild), and Carl Steffen (Fort Dearborn).

Grand prize winner in the finals was J. Elwood Armstrong's "Sunday Morning Retreat," which appeared on the August PSA JOURNAL cover.

Final scores for top half of clubs in each competition were as follows:

Class A Clubs, Prints

Channel City (Santa Barbara)	442
Silhouette (Detroit)	424
Photo. Guild of Detroit	420
Fort Dearborn (Chicago)	394
Western Reserve (Cleveland)	381
Atlanta	385
St. Louis	365
Queen City Phot. (Cinn.)	364
Rock Island (Ill.)	355
Germantown (Phila.)	350

Class B Clubs, Prints

Oakland	372
Club Fotografico de Cuba	360
The China Photo (N. Y.)	360
Tulsa	356
Lawson (Chicago)	359
Jackson Park (Chicago)	326
Delta (New Orleans)	308
Phoenix	258
Blackhawk (Iowa)	288
Eastville (Iowa)	224
Albany (N. Y.)	291
Stillwater (Iowa)	290
Motor City (Detroit)	278
Oleams	278
Berkeley (Calif.)	275
Bloomington (Ind.)	270
The F. S. Club	265
Independence (Kans. City)	250
Shorewood (Milwaukee)	248
Diablo (Canal Zone)	241
San Luis Obispo	240
Seven Hills (Cinn.)	232
Erone (N. H.)	228
Mid-South (Memphis)	227
Akron-Portage	224
Owego (N. Y.)	218
Rain (Rochester)	210
Edinboro (Iowa)	204
Portland (Maine)	200
Orad (N. Y.)	197
Orden (Utah)	193

Class A Clubs, Slides

Venango Camera C.	545
Chicago Color C. C.	527
Sacramento Photo	524
El Camino Real Color	509
Salt Lake Photo	507
Calculus Color	506
Detroit Photo Guild	492
San Francisco Photo	491
Pasadena Photo	490
Sanborn Camera (Utah)	489
Science Museum Photo	487
Hasthorne Camera C.	475
Croan City (Milwaukee)	465
Salt Lake Chromites	459
North Shore (Mass.)	457



MORNING MOOD

J. J. Rudnay

1st Place Winner in June Contest



BEFORE RACE

Boris Dobro

2nd Place Winner in Finals

Class B Clubs, Slides

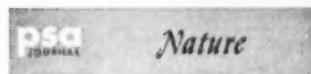
Edison Camera C.	445
Pacific Trails (Calif.)	421
Owego (N. Y.)	415
Standard (Conn.)	413
Hawaii Color Phot.	410
Keene (N. H.)	410
Bell Camera (Denver)	396
Toronto Camera C.	390
Germantown Photo	389
Cleveland Women	385
Jackson (Mich.)	379
Atlanta Camera C.	377
Koda Rotomers	376
Imox County	375
Rockefeller Center	372
Jackson Park (Ill.)	360
Akron Portage C. C.	360
Bethlehem Photo	360
Belen Camera C.	355
Minneapolis Women	349
Bethelton Color	346
Oakland Camera C.	345



LITTLE FISHERMEN

E. G. Newhall

2nd Place Winner in June Contest



By LOUISE BROMAN JANSON, AFSA

6252 S. Kedzie Avenue, Chicago 29, Ill.

There has been considerable controversy on the subject of deception in nature photography. Unlimited patience and hard work enter into the truthful recording of the life study of plants and animals, thus the desire to make this field of activity easier is ever prevalent. But those who make their pictures the easy way, by using dead insects and mounted birds and animals, are defeating their purpose as nature photographers.

Most of the instances of deception in nature pictures are made by photographers who have just begun to turn to nature for camera subject material. These people are searching for photographic copy and in using lifelike specimens obtain results that are usually excellent still-lives. Seldom can they show their subject in a completely natural pose to the smallest detail, because most beginners in the study of nature lack knowledge of the subject's habits and characteristics. However, some of these pic-



FENDANT SPIRAL

LaVerne Bovair

3rd Place Winner in Finals

tures are good photographs and pass the keen eyes of the nature salon jury. Their acceptance in nature exhibitions encourages the novice to create more nature still-lives. The amount of effort required to portray a dead bird, butterfly, or snake in a life-like pose, is much greater than all the obstacles presented by the living subject.

The true nature photographer does not try to create false photographs. To him such pictures have no value and no appeal for the sport of obtaining nature pictures lies in his ability to solve the many problems that present themselves in such a way that the result is an authentic record of nature.

In making these statements it is not intended that the photograph should be made without control. It is necessary to be highly selective, to clarify the subject from a confused background, to use judgment in making the picture pleasing from an artistic angle and accurate from the scientific standpoint.

The following article gives the views of a nature photographer, Kent Prevettie, in this regard.

Naturalness in Nature Photography

Table tops and artificial backgrounds are on the wane. As more people become interested in nature photography the trend to naturalism becomes evident and the departure from pictorial clichés more pronounced. This is especially true in the use of color film, and particularly so when intended for projection purposes. Black-and-white prints are of an artificial medium and many of the practices followed in salon subjects may be used honestly in nature subjects, but even in this field there is a trend away from stylized treatment.

This tendency is welcomed by a rather small but growing group of photographers who may be termed as addicts of f 16. They have been gratified to observe the trend to accept Mother Nature as she is, with her diversity of moods and her myriad patterns of garb and behavior. They know that even when informal she is in good taste, that her colors blend and are properly related to their surroundings. They also know that she, like human beings, has her better angles of profile and that these should be approached thoughtfully for the best portraiture.

It is in the field of wildflower photography that this trend particularly finds expression, though the same principles apply to other phases of natural history, whether bird or insect, rock or reptile. The conventional factors for judging a transparency—nature, photography, and art—apply to all subjects, and all three are equally important.

To the ultra type of naturalist the stress of all three values may not seem rational. His picture, though devoid of artistic approach and possibly poorly exposed, may be rare and important. It may contribute valuable information to his subject field, and the fact that it lacks technical and pictorial excellence is of less consequence to him. He would, however, appreciate careful exposures which are important in

documentary films, but it is doubtful that he would bother with artistry.

In contrast to this type of photographer is the one who employs the techniques of table top and studio. His subjects are taken to the camera rather than the reverse. Ideal conditions are created for camera work. Problems of wind, rain, and shadow are overcome in the studio by their elimination. Stereotype forms of composition are employed. He strives to be pictorial, and possibly succeeds, but he sacrifices certain subtleties of texture, color, and natural arrangement that are solely the expression of nature and beyond the craftsmanship of man.

The ultra type and the studio type may have several practices in common. Both may separate the subject from its surroundings. Both may use backgrounds of tawdry cardboard, each for a different purpose. With one it would be to emphasize, create a document. With the other to lift from busyness, paint a picture. Both may contribute to each other, but both would do well to strive for the completely natural.

In addition to technical problems such as exposure, depth of focus, and parallax for many types of cameras, the working with wildflowers involves an infinite amount of patience and a study of wind rhythms. Of most importance, however, is selection—selection of subject, of surroundings and background, and of approach.

It is not enough to be content with a properly exposed flower while the background is a blurred mass of circles of confusion. The theory that the background should be out of focus is, in many instances, false. Rather, the subject is sucked back into the confusion. The use of small aperture (f 16 whenever possible) with the resulting depth of focus not only emphasizes the subject but creates perspective in relation to its habitat. The harmonies of color in rock, log, or soil are revealed. The texture of moss, lichen, bark, or leaf enriches the setting rather than detracts from the flower.

To get that extra dimension, to seek an intimacy with the subject, to be there—that should be the objective of every nature photographer. It is not enough for the naturalist to find the flower, bug, or fossil; it is not enough to be a photographer and have the equipment; rather, the third factor is needed, the artistry of presentation, with its resulting impact of beauty in knowledge.

In addition to the aesthetic qualities there is another important consideration—that which may be termed loosely as ethics. Even an ardent conservationist would not hesitate to break off a branch of pawpaw blossoms in the midst of a thicket and place it within range of his camera and tripod, nor could anyone be censured for picking up a storm tossed blossom of the tulip poplar and placing it conveniently near his camera, but in any similar case the relation to the surroundings would be detected as false. Certain insects removed from their botanical hosts, mammals from their environment—such liberties do not contribute to sincerity, and sincerity is essential to the naturalness of

the picture. Photographers are learning this, and the judges of salons are beginning to learn it, too, but the ordinary nature lover has known it all along—KENT PREVETTIE.

Coming Nature Exhibitions

PSA Oct. 18-Nov. 1. Deadline Sept. 16. Four slides \$1.00. Four prints \$2.00. Entry forms: Ernest C. North, 6209 Frederick Rd., Baltimore 28, Md.

Irish Kentucky Nov. 19 to Dec. 3. Deadline November 6. Four slides \$1.00. Four prints \$1.00. Data: Kent Prevettie, 7220 Highland Ave., Louisville 4, Ky.

Photo-Journalism

By CLIFF EDOM, APSA

18 Walter Williams Hall, Columbia, Mo.

Members of the Photo-Journalism Division were more than pleased to learn that PSAer Roy E. Stryker, formerly of the Farm Security Administration, and later photo director of the Standard Oil of New Jersey, is now located at the Cathedral of Learning, University of Pittsburgh. Here, as director of a new and breath-taking photo project, Stryker will continue his great work of documenting the American Scene. The Rochester Institute of Technology, on the evening of June 3, paid deserved tribute to Roy Stryker, when in recognition of the work he has done and is doing, it presented him the first Frederick K. Brehm medal. That same night, Stryker presented the first of a series of lectures established as a tribute to Mr. Brehm—photo documentation of an earlier day.

Another great name in the photographic world which has received recognition during 1950 was that of Captain Edward Steichen, Hon. FPSA, Director of Photography, the Museum of Modern Art. Captain Steichen, the only photographer to be so honored, won the American Institute of Architects Fine Arts Award.

Rus Arnold, APSA, who did such a grand job for the Photo-Journalism Division at the Chicago meeting, has consented to act as commentator for the PJ portfolio. In addition, he has begun work on a series of recorded film-slide talks for PSA, and is doing some research for a paper to be read this fall at the Biological Photographers convention.

On the Groundglass

P. Jer C. J. Murphy is an architectural superintendent on construction and works out of Detroit. Mr. Murphy is Eastern correspondent and photographer for the *Utah Farmer*, Salt Lake City. As to photo equipment, 25-year-old C. J. says, "it keeps me broke all the time."

M Sgt. Howard H. Springate, an Air Force photographer, has had 15 years of experience, and owns enough equipment to run a shop, although, as he puts it, "he likes to trade and dicker for more." Sgt.

Springate uses a twin-lens reflex and a Speed Graphic. He is proud of some of his shots of modern types of combat aircraft. "Anything that concerns the P-J field," Springate says, "is of interest to me." He is especially interested in market information and wishes to contact other P-Jers. Especially, he would like to see their work. Well, that's the purpose of the P-J Portfolio, Sgt. Springate. Those of you with market tips could do the whole Division a fine service by sending them in for this column.

Dick Harris, Thermopolis, Wyoming, writes: "Just a note to thank you for the issue of the *National Press Photographer*. I missed a copy of my JOURNAL, and so didn't know it came from the P-J Division until this issue. I really enjoy the magazine and the whole thing is right up my alley. You see, I hope to become a staff photographer for one of the larger papers in a few years. Right now, I'm interested mostly in press work, and have been for 2 years. I am 18 years old, and have some stuff in the *Chicago Tribune*, (Acme), sold to *International* in N. Y. on assignment, a lot in the *Denver Post*, including a full Sunday picture page, and a bunch of local papers. You see, I go for the press angle of Photography in a big way. This is the reason I enjoy my copy of the NPP so much, and also why I like the P-J Division, and find it a great help in my work. My only method of obtaining new equipment is through the sale of my pictures, and I think with the help of PSA sales will go up. In my two years of free-lance press work, I've made enough to get a new Pacemaker Graphic with full extension speedlight equipment."

Clifford Real, Beloit, Wis., like Sgt. Springate, is concerned about markets for his free-lance offerings. He writes: "I like the Photo-Journalism Division and the magazine, *The National Press Photographer*, very much. I need help on what or where to contact different markets for pictures. I like to take pictures at Young Peoples Church camps, and will attend two or three this summer. My own church publication (Methodist Publishing House in Nashville) does good by me, but I really never know what is salable." Mr. Real, who is 42 years of age, does some work for the *Beloit Daily News*.

John Ahlquist, 18, writes: "I have just started a career in photography. I do some free-lance work and have a job as staff photographer with the *Richfield, Minn., News*. I also do photographic work for my squadron in the Naval Air Reserve." Johnny feels that he is gaining much from his PSA membership—From PSA he says, he increases his ability and understanding of photography. He enjoys the PSA publications and the competitions the Society sponsors.

Charles F. Wellen, 30 and single, is manager of the Camera Department for Decker Bros., in Mason City, Ia. In his spare time, Wellen does photo work for the Sheriff's office. He also does an occa-

PJ NOMINATIONS

The nominating committee for the Photo-Journalism Division has announced that a slate of officers for a two-year term, beginning in October 1950, has been selected as follows:

Chairman: David B. Eisendrath, Jr., APSA, Brooklyn, N. Y.

Vice Chairman: H. A. Schumacher, APSA, Rochester, N. Y.

Sec.-Treas.: Jo Scott, Columbus, Ohio.

sional spot news job for the local paper, and now and then handles a wedding assignment. Wellen, who likes the NPP publication, says he could use some propaganda on selling PSA and the P-J Division to local news photographers. Mr. Wellen has been in photography since 1935—as a hobby until after the War. He spent three years overseas. A graduate of the Southwest Photo Arts School, Dallas, he free-lanced until the fall of 1948, when he took a position in a camera store.

Interesting, indeed, is this communication from PSAer **Tom Elwell**, of the Pailard Products, New York City. Tom writes: "Glad to see someone doing things to raise status of press photographers and ipso facto, press photography. Have suffered at hands of old time 'picture snatching' boys in days gone by. Would like to see a qualification scheme for all pros—but more democratic than the current British IBP tests in London. Press and magazine work is my first love—been at it all over the world (off and on) for past 22 years."

Another 18-year-old photog, and a comer, we believe, is **Dick Harris** of Thermopolis, Wyo. Dick has been taking pictures for three years, and has sold stuff to the *Chicago Tribune* and the *Denver Post*, as well as to Acme and *International News Photos*. He has a 4x5 Pacemaker Graphic, with two lenses, an Auto Rolleiflex, and a 35mm Perflex. Dick suggests that "members of the P-J Division send in suggestions and mentions of helpful items for other members." They are, he says, "willing to pass on helpful information; they are a swell bunch." To which we say amen. Dick starts the ball rolling with this hint: "A helpful gadget for the Speed Graphic owner is the new lens shade which fits several different lenses. It has a small lever on the side which controls your 1-stops from the top and has an indicator on the hood. This sure speeds up the stop setting business." Any more hints or suggestions which might make the going a bit easier for a fellow photog? If so, send 'em in.

Still another 18-year-old PJer is **Ted Carr** of Great Falls, Montana, now studying ground photography at Lowry Air Force Base in Denver. Ted has been a member of the Pictorial Division two years, and a member of the Great Falls Camera Club four years. Before graduating from

high school Carr was photo editor and chief photographer for both the school paper and yearbook. Young Carr plans to go to college to study photo-journalism. His ultimate aim is to become a picture editor on a metropolitan paper.

Stephen Borden is a student at Kent School, Kent, Conn. His hobbies are photography and radio. Borden hopes to get an amateur radio license in the near future. Only 15 years old, Stephen joined the P-J Division "to learn more about this branch of photography."

Roy C. Williams, Brownsville, Texas, is a reporter-photographer in the Brownsville Bureau of the *San Antonio Express and Evening News*. Roy reports: "Here in the southernmost American city photographers never want for sunshine; but over-exposure, over-development and reticulation are constant hazards."

As I write this, another excellent P-J "Newsletter" from Sag Kash, of the *Cynthiana, Ky., Democrat* crosses my desk. Kash is doing a wonderful job with these quarterly missives, and he appreciates very much the comments and items you folks are sending in. Keep 'em rolling. It is one way you can help make the Photo-Journalism Division what you want it to be.

Another way you can contribute to the Photo-Journalism welfare is to join up with one of the P-J Portfolios. It will give you an opportunity to see what the others are doing—will enable you to benefit from some friendly, constructive criticism. Besides that, you become acquainted with P-Jers many of whom are facing the same problems which you face. It really is a good investment. Why not drop a note (and a buck) to E. R. Christliff, Hon. PSA, APSA, Director of PSA American Portfolios? His address is Suite 406, 800 Davis Street, Evanston, Illinois. Of course, you will specify the Photo-Journalism Portfolio.

It was worth waiting for! We are speaking of *The Complete Book of Press Photography*, the splendid book published in mid-summer by the National Press Photographers Association, Inc. **Joe Costa**, APSA, and his co-workers have done a marvelous job—have turned out a "must" book for all persons interested seriously in Photo-Journalism. We predict that "the complete book" will be adopted by many Universities and colleges for classroom use—that it will have even a wider sale among news photographers and all who work with pictures. With its completeness, its beautiful format and its overall size, here is one book you can not afford to miss. Watch for the advertisement in your issue of NPP.

A friendly note from **Ralph E. Gray**, APSA, postmarked "way up in Belfast, Maine, closes with these words: "Will look forward to seeing you and many other friends at the Baltimore Convention." Here's hoping you will be there—and that you will do your part in letting others know the P-J Division is on its toes.



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The fourth judging of the Print of the Month Contest was held at PSA Headquarters and the judges announced the following results:

Aug. Print of the Month Contest



MORNING

Arnold Kidson



WARRIOR

W. H. Greenhalgh, Jr.

Beginners Group, Pictorial Class

- 1st—Wesley I. Reid, Minneapolis, Minn.
2nd—George Munz, Bergenfield, N. J.

Beginners Group, Nature Class

- 1st—Capt. Wm. Greenhalgh, Jr., Monument Beach, Mass. "Warrior"

Beginners Group, Action Class

- 1st—S. M. Stelson, Durham, N. C.

Advanced Group, Pictorial Class

- 1st—Dr. John Anderson, Grand Island, Nebraska
Tie—Arnold Kidson, Middlesbrough, Eng.
"Morning At Norway"
Clifford Paul, Moline, Ill. "Artist"

Advanced Group, Nature Class

- 1st—Irving Rosen, Corona, L. I., N. Y.
"Lunch Time"
2nd—Gilbert Lum, Honolulu, Hawaii.
"Sprouting Fern"

CONVENTION CONTEST

A "Pictures of Members by Members" Contest will be held in connection with the Baltimore PSA Convention. Prizes of \$15.00, \$10.00 and \$5.00 will be awarded by popular vote for pictures of PSA members taken at any time at any place.

Entries must be received no later than October 14th by Karl Emery at 2 North Ave. East, Baltimore 2, Md. Prints not smaller than 2 1/4 by 3 1/4 or larger than 11 by 14 are eligible, including Land Camera prints. All pictures must be clearly labeled as to subject and maker.

All prints will become property of PSA and none will be returned.

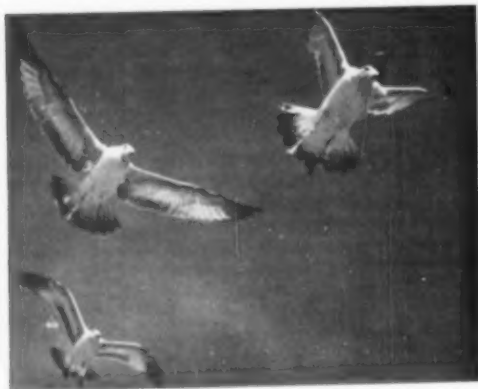
Advanced Group, Action Class

- 1st—Clifford Paul, Moline, Ill. "Flight"
2nd—Irving Rosen, Corona, L. I., N. Y.
"Passing"



NO TITLE

Wesley I. Reid



FLIGHT

Clifford R. Paul, APSA



FOG BOUND

John S. Anderson

PSA JOURNAL, Vol. 16, Sept. 1950



COLOR DIVISION SUPPLEMENT TO PSA JOURNAL

FOREWORD

WITHIN THIS ISSUE the Color Division takes its place among the Divisions that have completed supplements to PSA JOURNAL covering their sphere of activities. So very well have these other Divisions done their work that we can only hope that ours has been done as well.

WITH THE EXCEPTION of "Who's Who In Color Slide Photography," which is necessarily a part of this issue, all material used has been carefully selected so that it will be of value to both color and monochrome workers, in many instances to movie makers as well as still photographers. Other than to say that all the articles and almost all of the illustrations are by members of the Color Division, no special credit will be claimed. Although only a limited number of names appear in the table of contents or are credited with illustrations, this project is actually the result of complete cooperation within the Division.

UNFORTUNATELY, the cost of full color reproductions is such that we must use monochromatic illustrations. Many of the prints used were made from negatives, which in turn were made from color transparencies, and in almost all of the instances where prints were made from direct black and white negatives, similar color transparencies exist. We hope you enjoy reading this supplement as much as we have enjoyed preparing it for you.

KARL A. BAUMGAERTEL, APSA
Chairman, PSA Color Division

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Color Division and Color Slide Exhibitions

H. J. JOHNSON, APSA

COLOR DIVISION establishes no "rules" covering color shows. It does list conditions for obtaining its support, but whether any show wishes to meet these conditions is its own business.

Some shows still permit entries of 15 slides. Color Division itself permitted 10 slides when it sponsored the first all color show ever held. However, the volume of work for the judges was such as possibly to reflect in the quality of the judging, and the maximum was reduced later to six slides, and finally to four. (Even so, some color shows receive almost 3,000 slides.)

Color Division does not list shows which receive fewer than 300 slides or accept fewer than 100. There is no "ratio of acceptance" implied here; the figures merely indicate that shows below these minimums have little significance. With fewer than 300 slides from which to select (it is not likely that they would all be Rembrandts!) the quality suffers. Fewer than 100 slides accepted can hardly be called an "international exhibition."

No acknowledgment of receipt of entries is required because a report card showing results of judging² is required shortly after judging. A catalog is required and represents the only tangible return for the entry fee in most cases.

Color Division does not list shows which have an interval longer than six weeks between deadline and last day of the exhibition. None of the problems of museum exhibition were found unsurmountable to efficient management and the requirement was therefore overwhelmingly approved by referendum. (If a show wants to hold slides for a month after receipt before judging, another several weeks before placing on exhibition, and finally a month on exhibition, that is its own business. But it is the contributors' business if they feel that such dawdling deserves no support.)

Shows which restrict the subject material or restrict those who may enter, are not listed. Such omissions are "without prejudice" since many such shows are good for their purposes. The problem is merely that there is no "common denominator" for them in comparison with other exhibitions.

An important statement of Color Division policy in connection with listing is that "exhibitions will not be listed if there are numerous complaints of damaged property, of failure to answer correspondence, or of undue delay in return of entries." Several shows which have apparently believed the contributors could be ignored as soon as their entry fees had been received have had trouble with this requirement. (With their commercial sponsors and advertisers, too!)

There are also a number of "recommendations" for color shows, but these are not conditional for Color Div. support.

One is that the color show be called an "exhibition" instead of "salon." (This is also the official recommendation of PSA for any photographic exhibition.) The old-time thought "salon" was the term for an art show; this is incorrect. American exhibitions of painting, sculpture, etc., are called "exhibitions" or "shows," never "salons." Apparently exhibitors are not overly impressed by "salons" because the world's largest color show is called "exhibition," the world's largest nature photography exhibition is called

"exhibition," and the largest black-and-white show is called "exhibition." (Of course, the PSA show itself is called "exhibition.")

It is recommended that the judging be by projection with approximately ten foot-candles illumination on a beaded screen. This recommendation has been under discussion for some time in Color Division and may be crystallized into a requirement. (Previous recommendations 6-7 fc.)

In connection with the judging, three judges or more are recommended (though practical considerations make more than three infrequent). One judge is not considered quite satisfactory because personal bias becomes too important. Judges from the sponsoring club are not considered best policy. As for the judges themselves, one may be an artist, a professional, or a black-and-white worker, but two of the three should be color workers.

Support of PSA Color Division for shows worthy of it is a tangible, effective thing. First is the use of the master mailing list, which contains the names of all active color slide exhibitors. These number about 2000-2500 each season, and are edited from a list of about 4000. Names and addresses are kept up-to-date by supplements during the season. Shows using the list averages 50% more exhibitors than non-users, and include the largest of the color shows.

The color "show packet" for use of new shows contains sample forms, publicity releases, budgets, etc., which make organization of a new show much easier.

Listing in the annual "Who's Who in Color Slide Photography" each September in PSA JOURNAL is an asset because exhibitors prefer to send to shows which will get their names into this list.

In addition, through items in the Color Division Bulletin, through personal distribution of entry forms, through recommendations for qualified judges, through personal consultation with sponsors, and in other ways, Color Division support becomes particularly worthwhile.

Photographic exhibitions are not easy to manage successfully, and most of them are happy if they can do a good "run-of-the-mill" job. A few shows, because of effective management, progressiveness, and conscientiousness do outstanding jobs, and for these Color Division has a "special recognition" plan.

The plan is based on data accumulated over a period of two years by twelve key exhibitors at various scattered locations, and then reported in the Color Division Bulletin. "Special recognition" is awarded to those shows which meet the usual recognition requirements, and which in addition: (1) are courteous to their contributors; (2) have report cards *in hands* of the average contributor within 8 days after judging; (3) have slides back *in hands* of average contributor within 14 days after close of the exhibition; and (4) have catalogs *in hands* of the average contributor within 17 days after close of the exhibition. Those requirements do not sound too difficult but not many shows are able yet to meet them. However, the number is increasing and ultimately it is expected that they will be numerous enough that contributors who do not intend to send to all shows will find a sufficiently large field among "special recognition" shows.

Who's Who In Color Slide Photography

1949-50

IN THE following listing, only those exhibitions which have met established standards for recognition are included. Accordingly, four American exhibitions and all foreign exhibitions except Canadian and one England (Southgate) are omitted. On the other hand, eight shows received special recognition from Color Division for high standards of management. The Southgate show was one of these. There were 670 color photographers who obtained the minimum number of acceptances in the following exhibitions: Arizona, Charleston, Chicago, Cincinnati, Columbus, Detroit, El Camino, Hawaii (1949), Louisville, Milwaukee, Minneapolis, Mississippi Valley, New York, Pasadena, Pittsburgh, PSA, Reading, Rochester, Sacramento, Salt Lake City, San Francisco (Calif. CC), San Francisco (Photochromers), Southgate, Southwest, Toronto, Tulsa, Victoria, Washington (1949), and Whittier. (Nature shows are listed separately, and will appear in the October PSA JOURNAL.)

Note that there are 29 shows qualifying for listing compared with 22 last season. Correspondingly, there has been an increase in the number of exhibitors. In addition to the 670 listed below, there were 855 who were successful in only one exhibition, and more than 1200 who submitted entries and had none accepted.

Judges' slides are not included in the following list, but asterisks indicate how many exhibitions the individuals have judged.

The "Who's Who" list is compiled annually by national committee member Blanche Kolarik from card files (more than 3000 individual cards) on which are recorded acceptances from the various exhibition catalogs. Catalog errors, variations in names and addresses, etc., require considerable investigation by direct inquiry. Color Division's cross reference files, and other sources developed for this purpose. Most such irregularities have been eliminated, but if there are any questions, these may be addressed directly to Mrs. Kolarik at 2824 S. Central Park Ave., Chicago 23, Illinois.

Name and Location	Exh. Slides	Name and Location	Exh. Slides	Name and Location	Exh. Slides
Aberl, Alice M., Berkeley, Calif. ...	3 7	Bennett, G. L., Chicago, Ill. ...	3 15	Blackhall, W. J., Toronto, Canada	2 5
Abrams, S. T., Berkeley, Calif. ...	8 10	Benoit, C. M., Quebec City, Canada	5 6	Blackman, R. C., Rochester, N. Y.	2 5
Acheson, Darwin P., Oakland, Calif.	2 3	Berglund, M., San Francisco, Calif.	5 7	Blaha, George W., Chicago, Ill.	*17 49
Adams, Blanche H., Phoenix, Ariz.	5 7	Berka, Egon, Chicago, Ill. ...	2 8	Blaha, Mildred, Chicago, Ill. ...	7 13
Aghassi, Ali, Great Neck, N. Y. ...	2 2	Biedel, C. W., Remerton, Wash.	2 2	Blaurock, Carl A., Denver, Colo.	6 9
Agnew, Louise C., Chicago, Ill. ...	22 44	Bodenbach, J., McConville, O.	4 5	Blosser, Elizabeth, Cleveland, Ohio	3 3
Agnew, Wallace G., Chicago, Ill.	19 42	Bodenberg, Rev. H., Oil City, Pa.***26	81	Boerringer, P. R., Honolulu, Hawaii	3 3
Ahern, R. F., Los Angeles, Calif.	18 56	Bishop, Dewitt, Sacramento, Calif.	3 5	Borcher, Dr. H., Santiago, Chile	4 7
Allen, Urban M., Honolulu, Hawaii	3 4	Bitman, Florence, Jamaica, N. Y.	8 12	Boggio, Peter, Los Angeles, Calif.	2 2
Ambrang, Paul L., Chicago, Ill. ...	4 5	Blachut, Irene, Los Angeles, Calif.	2 6	Bokor, Ted, Pasadena, Calif. ...	* 1 3
Amundsen, Dr. E. E., Toronto, Can.	15 31			Bomey, John, Maui, Hawaii ...	7 11
Anderson, Arthur, Evanston, Ill.	2 3			Born, R. C., Longmeadow, Mass.	8 17
Anderson, R. E., State College, Pa.	4 4			Borthe, Hans, Riverside, Calif. ...	6 10
Anderson, R. N., Detroit, Mich. ...	4 10			Bourne, Edw. H., Rochester, N. Y.	7 13
Armstrong, Dr. S. B., Los Angeles, Cal.	2 2			Brauer, Ethel, Los Angeles, Calif.	2 5
Armstrong, A. M., Columbus, Ohio	6 9			Brauer, Geo. F., Los Angeles, Calif.	8 19
Asneson, Gene, Kenosha, Wis. ...	5 7			Brennan, Jack, Salt Lake City, Utah	3 6
Arrington, J. R., Tulsa, Okla. ...	2 2			Brennan, Mac, Salt Lake City, Utah	5 11
Austin, Wallis, Oak Park, Ill. ...	2 2			Brice, Norman R., Clayton, Mo. ...	**25 66
Ayres, E. D., Los Angeles, Calif. ...	4 5			Brimmer, C. H., Wausau, Wis. ...	4 5
Ayres, Irene, Los Angeles, Calif. ...	7 13			Britton, Ivy M., Glen Ellyn, Ill. ...	6 6
Babala, Michael, Dearborn, Mich.	4 6			Brockett, R. M., Chicago, Ill. ...	3 5
Bagley, Edgar S., Iowa City, Iowa	2 4			Brodton, R. A., Everett, Pa. ...	2 2
Bahnen, Mrs. E., Yellow Sprig, O.	26 44			Bronzi, Martino, Torino, Italy ...	2 2
Baird, S. W. J., Halifax, N. S. ...	2 3			Brookins, G., San Bernardino, Cal.	3 7
Ball, John S., Montreal, Canada ...	2 2			Brookins, J. C., Ontario, Calif.	3 3
Banister, W. A., Tulsa, Okla. ...	3 7			Brott, Lawrence L., Oswego, N. Y.	2 2
Barker, I. C., San Francisco, Calif.	2 5			Brower, R. G., Los Angeles, Calif.	2 2
Barrett, Dr. C. E., St. Lake City, U.	** 9 17			Brown, Albert N., Chicago, Ill. ...	4 9
Barrett, O. H., Salt Lake City, Utah	15 27			Brown, D. M., Salt Lake City, Utah	2 2
Bartholomew, Gaudano, Torino, Italy	2 3			Brub, Mrs. L., San Bernardino, Cal.	8 9
Barton, Christine, Toronto, Canada	2 5			Brunfield, T. R., Columbus, Ohio	*12 25
Bauer, Dan, Buffalo, N. Y. ...	3 4			Buck, Dr. C. J., Beaver Falls, Pa.	2 2
Baumberger, M. E., Portland, Ore.	0 16			Buln, N. G., Honolulu, Hawaii ...	6 7
Baumgaertel, K., San Francisco, Cal.	29 70			Burbridge, H. G., Port Arthur, Can.	5 10
Bechtold, Ira C., Whittier, Calif. ...	4 8			Burgess, Dr. J. F., Montreal, Can.	4 11
Beese, R. S., State College, Pa. ...	13 25			Burnham, R. P., Santa Barbara, Cal.	4 4
Beigel, Gisela, San Francisco, Calif.	3 3			Burth, Herbert P., Chicago, Ill. ...	5 13
Belnap, E. R., Salt Lake City, Utah	2 3			Busey, Paul G., Urbana, Ill. ...	3 5
Benn, Frank W., Skokie, Ill. ...	13 28			Butler, Wyatt A., Atchison, Kans.	3 4
Bender, Cammon J., Prescott, Ariz.	8 14			Buxton, Eugenia, Memphis, Tenn.	16 26
Bengston, E. D., Minneapolis, Minn.	5 11			Cador, Don, Columbus, Ohio ...	4 4
Bengston, M., Minneapolis, Minn.	3 4			Calhoun, H. S., Wayland, Mich. ...	2 2



ENTICEMENT

A. Stewart

Name and Location	Exh. Slides	Name and Location	Exh. Slides	Name and Location	Exh. Slides
Caenon, Jack B., Glendale, Calif.	2 5	Friend, V. R., Visalia, Calif.	5 6	Johnson, G. F., State College, Pa.	**21 48
Caenon, Jack, San Francisco, Calif.	*25 56	Frost, Francis R., Kansas City, Mo.	2 5	Johnson, G. L., Westbrook, Maine	22 43
Carlson, Esther J., Chicago, Ill.	4 5	Fuguet, Wm. D., New York, N. Y.	*25 45	Johnson, H. Buffum, Brunswick, Me.	2 5
Carmichael, Bud, San Jose, Calif.	3 3	Furushima, T. T., Honolulu, Hawaii	2 1	Johnson, H. J., Chicago, Ill.	*26 59
Carpenter, J. K., Los Angeles, Calif.	2 5	Gambacusa, J. J., New Orleans, La.	10 11	Johnson, J. F., Minneapolis, Minn.	2 4
Carter, W. A., San Diego, Calif.	7 8	Garlick, F. A., Rochester, N. Y.	4 6	Johnston, W., Minneapolis, Minn.	2 4
Castle, Dr. H. C., San Diego, Calif.	6 8	Gatlin, Victor N., Tulsa, Okla.	4 5	Jones, Ralph E., Columbus, Ohio	10 18
Chambers, C. V., Tucson, Calif.	5 8	Gerda, Carl, New York, N. Y.	2 5	Judy, Mrs. M., Los Angeles, Calif.	2 5
Chandler, Dr. M. N., Toronto, Can.	14 20	Gettschell, F. M., Oshkosh, Wis.	2 4	Keating, D. S., Miami Springs, Fla.	5 4
Chapin, E., Staten Island, N. Y.	3 4	Getzenauer, C. W., Forest Grove	8 17	Kesch, Estelle, Racine, Wis.	2 5
Charal, A., Bronx, N. Y.	4 5	Giddings, J. Reed, Pasadena, Calif.	2 5	Kerker, C. V., Opportunity, Wash.	2 5
Church, Eleanor, New York, N. Y.	11 15	Gill, Jos. B., Salt Lake City, Utah	2 5	Kermener, N. F., London, England	2 4
Church, G. H., Tucson, Ariz.	2 5	Gilliland, Paul S., St. Louis, Mo.	4 11	Kermener, R. S., Hayward, Calif.	9 17
Cismonds, Ed., San Jose, Calif.	2 5	Gingrich, Audrey, Detroit, Mich.	3 5	Kennedy, Joe E., Tulsa, Okla.	10 17
Cisewski, R. S., La Grange, Calif.	3 5	Ginn, James W., Los Angeles, Calif.	2 5	Kephart, P. R., River Forest, Ill.	5 7
Clark, R. L., Sacramento, Calif.	22 45	Girtton, Harold, Anaheim, Calif.	9 16	Kephart, Mrs. R. P., River Forest	5 6
Clark, W. K., Red Deer, Canada	15 53	Giddens, Harriet, Whittier, Calif.	2 5	Kibbe, Eugene, Mill Valley, Calif.	*1 1
Clemens, G., McConville, Ont.	9 15	Glover, Winifred G., Prescott, Ariz.	2 5	Kidwell, O. A., Pasadena, Calif.	15 32
Cnath, Arthur R., Worcester, Eng.	2 2	Gluck, Herbert, N. Y. City, N. Y.	3 4	Kinberger, J. X., Louisville, Ky.	4 8
Coburn, H. K. Jr., Roswell, N. M.	2 2	Goldman, Rm. J., New York, N. Y.	3 5	King, Alan G., Oak Park, Ill.	2 2
Cole, Bruce, Tucson, Ariz.	11 25	Goodrich, H. W., Milwaukee, Wis.	2 2	King, Betty, Shaker Heights, O.	7 11
Collins, R. E., Connersville, Ind.	2 2	Goodwin, Mrs. J. E., Toronto, Can.	2 4	Kirkland, James L., Chicago, Ill.	25 48
Conners, J., St. Louis Park, Minn.	2 2	Gordon, Mrs. C. A., Keyport, Wyo.	2 2	Kitt, Arthur L., New York, N. Y.	2 5
Conrath, P. A., Webster Groves, Mo.	5 6	Gray, Larry, St. Louis, Mo.	4 9	Klatt, R. H., Minneapolis, Minn.	4 6
Cook, C. D., Lakeside, Mich.	2 6	Gray, Mrs. Lillian, Chicago, Ill.	4 9	Klein, A. C., Milwaukee, Wis.	16 22
Coon, John Henry, Baltimore, Md.	2 2	Gray, Orin H., Homewood, Ill.	22 46	Knollman, Eleanor, Alhambra, Calif.	2 2
Corlett, R. V., Toronto, Canada	11 15	Green, Chas. H., Richmond, Calif.	3 4	Knollman, Blanche, Chicago, Ill.	*27 67
Crocker, Byron S., Glendale, Calif.	15 28	Green, G. L., Grand Junction, Colo.	2 5	Krause, Earl E., Chicago, Ill.	7 11
Craig, John L., Miami, Fla.	3 3	Greenwood, E. C., Hollywood, Calif.	2 5	Krause, Glenn R., Wash., D. C.	5 12
Craig, Marg. N., Marshfield, Mass.	20 49	Greenwood, H. W., Hollywood, Cal.	15 55	Kriete, Russel, Chicago, Ill.	22 51
Cramer, Leonard, Salt Lake City, Utah	3 5	Grier, Frances, New Castle, N. H.	4 8	Krimmel, John A., Edinboro, Pa.	2 5
Cullum, Arthur, Yonkers, N. Y.	2 5	Griffin, Bette, Stamford, Conn.	2 4	Kroeger, P. M., Minneapolis, Minn.	12 21
Cundiff, Selma, Methuen, Mass.	2 5	Griffin, Douglas, Toronto, Canada	6 6	Krueger, E. W., Monterey, Mexico	12 21
Cunning, Virgil A., Corona, Calif.	5 6	Gruener, Cora A., Chicago, Ill.	2 2	Kunhardt, Zora, Chicago, Ill.	19 54
Curtis, M. K., Oakland, Calif.	2 2	Gutleben, D. C., Menlo Park, Cal.	8 4	Kyle, Margaret, Columbus, Ohio	19 54
Cushman, Stephen M., Racine, Wis.	2 5	Haines, Harry New York, N. Y.	16 56	La Due, Noel, Sacramento, Calif.	2 5
Dale, Alan J., Milwaukee, Wis.	4 6	Hart, Dr. G. M., Rochester, N. Y.	4 7	Langer, Harry A., Chicago, Ill.	*4 7
Darby, R. E., Westfield, N. J.	18 21	Halwa, T. J., Port Credit, Canada	4 7	Lavoy, Louis, Quebec, Canada	2 2
Davis, B. R., Salt Lake City, Utah	7 14	Hamilton, Miss S., San Gabriel, Cal.	2 5	Lawler, Dolores D., Kenosha, Wis.	2 2
Davis, Howard W., Milwaukee, Wis.	2 5	Hamlin, Gladys E., Wash., D. C.	2 2	Lawler, T. M., Jr., Kenosha, Wis.	5 11
Davis, Maurice, Danvers, Mass.	2 5	Hankins, Dr. H., Durban, S. Africa	2 5	Lawrence, A. I., Dr., Flushing, N. Y.	5 5
Deffen, W. J., Milwaukee, Wis.	2 4	Hanson, L. D., Minneapolis, Minn.	12 21	Lawrence, C. A., Florissant, Mo.	2 5
De Groot, F. D., Berkeley, Calif.	2 4	Hardie, Dale B., Minneapolis, Minn.	4 5	Lawrence, J. L., San Francisco, Calif.	2 5
Dell, H. C., Toronto, Canada	10 18	Harrington, R., San Francisco, Cal.	2 5	Layman, Harold, Louisville, Ky.	5 5
Delporte, Mrs. Marg., St. Louis, Mo.	3 4	Harris, R. V., New Canaan, Conn.	11 17	Leacock, L. H., Calgary, Canada	5 12
De Moya, Angel, La Habana, Cuba	15 22	Hart, D. W., Santa Barbara, Calif.	2 6	Lee, R. W., Los Angeles, Calif.	25 61
DePuy, Rev. C., Riverville, Wash.	2 5	Harvill, M. F., Salt Lake City, U.	5 7	Liebman, H., Chicago, Ill.	5 7
Derwich, C. F., Hamtramck, Mich.	12 16	Hausner, Flora, Minneapolis, Minn.	3 7	Lentz, Marie, Yakima, Wash.	2 5
DeVita, Irene, Toronto, Canada	2 2	Hays, D. C., Wash., C. H. Ohio	8 19	Leslie, R. R., Los Angeles, Calif.	5 5
Dewes, Anne Pilger, Chicago, Ill.	4 7	Hayward, E. H., Long Beach, Cal.	5 7	Lewis, Edson W., Riverside, Conn.	2 5
Diehneht, W., Monmouth, N. J.	2 2	Headley, P. W., Salt Lake City, U.	4 6	Lichty, Jean P., Cataraugus, Brazil	2 2
Dixon, James L., Homestead, Pa.	2 5	Headley, Wm. P., Columbus, Ohio	2 5	Lindberg, T., Minneapolis, Minn.	18 42
Dixon, Joe M., Roseville, Calif.	5 5	Hedeker, Jeanne, Rochester, N. Y.	4 5	Lindberg, Chas. A., Oakland, Calif.	2 2
Dorton, R. E., Los Angeles, Calif.	5 5	Hedeker, Russell E., Halifax, N. S.	5 4	Lindley, Mrs. Henry, Denver, Colo.	2 4
Dryas, E. R., Stockton, Calif.	3 5	Heller, Frank J., Bartlesville, Okla.	*8 5	Lockett, Florence, Los Angeles, Calif.	2 2
Ducker, P. Jr., La Canada, Calif.	2 5	Helmer Petersen, K., Copenhagen	2 2	Long, Wm. A., Pullman, Wash.	5 5
Duncan, Donald P., St. Paul, Minn.	2 4	Hershe, Ed. F., New York, N. Y.	6 11	Love, Paul, Glendale, Calif.	5 5
Duncan, J. L., Los Angeles, Calif.	4 5	Hess, James C., Monroeville, N. J.	2 2	Lowe, T. J., W. Medford, Mass.	4 7
Duvall, Albert H., Galesburg, Ill.	23 31	Hess, Frank E., Toronto, Canada	2 2	Ludwig, L. G., Los Angeles, Calif.	4 7
East, Mrs. W. F., Evanston, Ill.	5 2	Hickok, H. M., Santa Madre, Cal.	2 4	Lukins, R. H., Chicago, Ill.	10 25
Eaton, Wm. G. M., Toronto, Can.	2 4	Hiett, Lawrence D., Toledo, Ohio	3 8	Lundgren, C., Westover, Md.	2 5
Ebbelred, E., Jackson Heights, N. Y.	9 16	Hildebrand, J. H., Berkeley, Calif.	4 5	Lynch, Daisy May, Tulsa, Okla.	2 2
Eckert, I. G., Richmond Heights, Mo.	3 6	Hildersley, B. S., London, England	2 2	Lynch, Kenneth C., Tulsa, Okla.	6 12
Edgumbe, J. M., Rochester, N. Y.	2 6	Hill, Edward A., Fleetwood, Pa.	26 75	Maas, Edward J., Plainfield, N. J.	2 2
Ege, Mrs. Louise L., Cleveland, O.	2 2	Hill, J. L., Jr., Rochester, N. Y.	10 15	Mace, Selma, New York, N. Y.	2 4
Eldon, J. E., Melrose, Mass.	4 7	Hirt, G. G., Chapman Camp, Can.	5 9	MacMullin, Smith, Newkirk, Cal.	5 4
Elling, Mrs. M. Camaradega, N. Y.	4 4	Hobbs, Edward J., Cleveland, Ohio	6 15	Maddox, Loren L., Newark, Calif.	2 2
Elmer, Jean, Winnetka, Ill.	3 4	Hodges, Gordon B., Trarande, Can.	2 2	Mahaffey, J. Fielder, N. Y., N. Y.	18 31
Emmerson, C. R., Chicago, Ill.	15 35	Hogan, Mrs. E., Okla. City, Okla.	2 5	Mahoney, Les, Phoenix, Ariz.	5 10
Engelbrecht, E. L., N. Hollywood	6 15	Hoke, Harry G., Stillwater, Okla.	2 4	Maki, T. R., Hanover, Mich.	6 11
Enwell, M. S., Los Angeles, Calif.	9 15	Holloway, JoAnn B., Los Angeles	4 7	Manzer, Helen C., N. Y., N. Y.	*26 65
Fontaine, R. M., Southampton, Eng.	5 4	Holthaus, Don J., Yakima, Wash.	2 2	Martek, Mrs. E., Oakland, Calif.	5 5
Fargione, F. R., San Francisco, Cal.	7 6	Holt, Agnes M., Phoenix, Ariz.	7 9	Marvel, Donatha, Tulsa, Okla.	2 2
Faught, Dr. Francis A., Phila. Pa.	*11 10	Hope, Donald S., Bronx, N. Y.	2 2	Masters, Reynold, W. Covina, Cal.	8 6
Fay, Paul, Glendale, Calif.	2 5	Hornor, R. B., Chicago, Ill.	24 30	Masters, Clifford, Buffalo, N. Y.	5 9
Feldman, M., Wappingers Falls, N. Y.	2 2	Horvath, Allan L., Dayton, Ohio	2 2	Matt, Raymond A., Chicago, Ill.	7 14
Ferguson, Clarence, Toronto, Can.	2 4	Hosmer, Shirley H., Rock, N. Y.	10 10	Maugeri, H., Jackson Heights, N. Y.	6 7
Ferguson, Don, Salt Lake City, Utah	2 4	Howe, Chas. A., Homewood, Ill.	23 94	McKay, Helen, Cleveland, Ohio	15 17
Fernandez, F. J., Rochester, N. Y.	6 8	Hudson, E. F., Bakersfield, Calif.	4 7	McGrady, W. N., Rochester, N. Y.	4 7
Fetter, Capt. H. R., Halifax, Can.	2 4	Hungerford, Homer, Dallas, Texas	14 21	McKenney, J. R., Lihana, Hawaii	2 2
Fidley, Geraldine, Phoenix, Ariz.	4 7	Irene, Eleanor, Berkeley, Calif.	5 5	McGowan, H. C., Long Beach, Cal.	5 4
Fisher, Capt. M. M., Spokane, Wash.	2 3	Inou, W. Roy, Halifax, N. S.	6 8	McGowan, Katharine, Toronto, Can.	5 4
Fisher, T. J., Staten Island, N. Y.	2 2	Ito, Monte, Honolulu, Hawaii	4 5	McGrath, Janet, Evanston, Ill.	2 2
Flann, F. A., Meriden, Conn.	2 2	Jacobson, F. H., Minneapolis, Minn.	8 8	McKay, Alex. H., Smithport, Pa.	5 3
Fletcher, Garland B., Urbana, Ill.	4 8	Jahn, Burton W., Milwaukee, Wis.	5 11	McKee, C. B., Sacramento, Calif.	*25 68
Floyd, Howard F., New York, N. Y.	2 2	James, H., Hamilton, New Zealand	2 2	McKee, Claude, Escanaba, Mich.	2 4
Fowler, R. G., Surrey, England	2 2	Janson, Louise Bosman, Chicago, Ill.	*2 5	McLean, David, Endicott, N. Y.	2 2
Fox, Morris G., Honolulu, Hawaii	4 6	Janssen de Lempens, Dr. K. J., Th.	5 5	McLennan, H. K., Toronto, Can.	2 2
Frank, Robert E., York, Pa.	4 4	Javinsky, Wm. J., Cicero, Ill.	4 4	McLeod, E. M., San Francisco, Cal.	4 5
French, Geo. E., Los Angeles, Calif.	3 5	Jennings, A. G., Los Angeles, Cal.	2 2	Meibler, Mrs. L., Kensington, Ill.	17 45
Fretts, Alden L., Springfield, Mass.	6 12	Jennings, Geo. J., St. Louis, Mo.	3 4	Messel, Herman, Rochester, N. Y.	4 6
Freudman, Mortimer J., Wash., D. C.	*12 11	Jervis, Walter T., Brooklyn, N. Y.	4 7	Meyfield, N., Port Arthur, Can.	15 28

Name and Location	Exh. Slides	Name and Location	Exh. Slides	Name and Location	Exh. Slides
Miller, Art, Redlands, Calif.	3 5	Randall, B. B., Orinda, Calif.	3 4	Spaven, L. M., Rochester, N. Y.	14 26
Miller, Edward O., Stockton, Calif.	3 5	Ratcliffe, W. W., Orem, Utah	3 4	Sparman, Virginia, Omaha, Neb.	2 4
Miller, Evan J., Harrisburg, Pa.	4 5	Rawley, S. J., Milwaukee, Wis.	5 9	Squires, L. M., Honolulu, Hawaii	2 3
Miller, Harvey, Redlands, Calif.	3 4	Rayfield, Elsie H., Chicago, Ill.	2 2	Stanley, John H., Columbus, Ohio	4 7
Miller, Lowell, Rochester, N. Y.	15 21	Redell, Betty, Wauwatosa, Wis.	5 6	Stark, Mrs. Alice, Toronto, Canada	25 40
Miller, Paul L., Seattle, Wash.	12 21	Regan, F. T., Rolling Hills, Calif.	2 3	Stark, Wm., Toronto, Canada	20 30
Miller, Robert D., LaPorte, Ind.	3 4	Resch, H. R., N. Tonawanda, N.Y.	2 5	St. Clair, W. F., Jr., Honolulu	15 25
Miller, R. R., Lebanon, Ohio	12 16	Reichard, H. B., Bethlehem, Penna.	2 5	Steck, George F., Oil City, Pa.	25 62
Miller, Thomas R., Toronto, Can.	2 2	Reid, G. B., Santa Barbara, Calif.	4 5	Steed, J. S., Salt Lake City, Utah	2 4
Miller, W. D., Santa Ana, Calif.	2 5	Renito, Alfred, Bellevue, Wash.	5 7	Steffen, Gene H., Burbank, Calif.	2 3
Minster, Edwin C., Chicago, Ill.	4 7	Replogle, Mrs. M., Compton, Cal.	2 2	Stenberg, Philip, New York, N. Y.	2 2
Mintel, Amy A., Brooklyn, N. Y.	7 13	Reynolds, Perry G., Oakland, Calif.	5 5	Stettler, A., San Francisco, Calif.	5 6
Mitchell, Harry L., Chicago, Ill.	20 39	Rice, Dr. Frank E., Chicago, Ill.	20 10	Stewart, A., Santa Barbara, Calif.	25 72
Middlejones, John C., Cleveland, O.	3 9	Riches, A. T. M., Channel Island, Great Britain	2 2	Stewart, W. G., San Geronimo, Cal.	14 25
Moller, K. J., Helsingborg, Swdn.	2 2	Ridgen, D. L., Oakland, Cal.	2 3	Sullivan, W. F., San Francisco, Cal.	16 50
Moore, Dr. G. A., Sharon Hill, Pa.	4 7	Ritterhouse, P. L., New York, N.Y.	8 13	Suter, Al, Chicago, Ill.	2 5
Moore, Rbt. J., Minneapolis, Minn.	3 5	Ritten, Lorraine, Eagle Rock, Cal.	8 10	Suter, Helen, Chicago, Ill.	3 4
Moore, Sinclair, Oak Park, Ill.	3 5	Roberts, L. S., Whittier, Calif.	8 10	Suter, Mrs. W. L., Winnetka, Ill.	2 5
Morehouse, John J., Chicago, Ill.	3 13	Robertson, J. E., Milwaukee, Wis.	4 10	Swain, Rev. J. R., Middleton, Wis.	2 5
Morgan, Wm. L., Monterey, Calif.	3 4	Robinson, Mrs. A., Milwaukee, Wis.	10 20	Swink, C. F., Elmhurst, Ill.	3 5
Mortley, S. G., Berkeley, Calif.	3 4	Robinson, L. Jr., Redondo Bch, Cal.	8 12	Syverud, Warren, Rochester, N. Y.	15 36
Morris, V. C., San Francisco, Calif.	3 6	Robson, Mrs. F. S., Vma, Calif.	8 4	Tanimoto, Tyros, Honolulu, Hawaii	2 2
Morris, Ken, Jr., Dayton, Ohio	3 3	Rockwell, G. W., Halifax, N.S.	5 7	Taylor, J. S., Calgary, Canada	3 5
Moyer, Foster E., Reading, Pa.	12 20	Rolfe, Ashley E., Chicago, Ill.	4 6	Tennery, J. S., Downers Grove, Ill.	2 3
Moyer, James A., Chicago, Ill.	6 12	Romig, O. E., Pittsburgh, Pa.	4 6	Thomas, Sidney, Miami, Fla.	10 10
Moyse, M., London, England	2 5	Rose, Evelyn M., Brooklyn, N. Y.	2 2	Thornhill, H. A., Merced, Calif.	10 18
Muench, Emil, Santa Barbara, Cal.	17 15	Ross, Brig. G. MacLeod, Chi.	6 12	Tietzel, F. A., Columbus, Ohio	*14 17
Mulder, John G., Rochester, N. Y.	3 7	Ross, Mabel, Salt Lake City, Utah	24 56	Tillbeck, J. J., San Francisco, Calif.	*10 25
Mumm, Jacob, Anaheim, Calif.	2 5	Rothschild, N., Brooklyn, N. Y.	8 18	Tillotson, R. J., Batavia, N. Y.	2 4
Murphy, Roy H., Whittier, Calif.	3 17	Rubendust, A. M., Cincinnati, O.	4 6	Tunt, Dr. L. J., Chicago, Ill.	4 10
Nash, Ann E., Sacramento, Calif.	2 5	Ruch, Dr. F. J., Plainfield, N. J.	21 40	Tunham, M. T., Minneapolis, Minn.	4 5
Nesbitt, E. A., Tulsa, Okla.	6 7	Rudman, Mrs. V., St. Louis County	2 3	Toll, Grant, Windsor, Canada	3 2
Newhall, E. G., Santa Barbara, Cal.	*12 2	Rumler, W. T., Gainesville, Fla.	2 5	Totin, John, Honolulu, Hawaii	2 2
Newman, A., Oakland, Calif.	3 5	Saggos, Everett, Elberton, Ga.	2 3	Townsend, A., Lamha, Hawaii	3 4
Nichols, Tad, Tucson, Ariz.	3 7	Sandahl, H. E., Minneapolis, Minn.	2 2	Townsend, B. S., Johnston, Pa.	*25 60
Nipkow, P., New York, N. Y.	3 6	Sankey, Harriet E., Chicago, Ill.	3 5	Tozer, Edward G., Oshawa, Canada	3 5
Noigard, Mrs. E. D., Los Angeles	5 10	Sarrif, Walter, New York, N. Y.	5 6	Tozzi, Michael D., Trenton, N. J.	4 4
Noigard, F. L., Los Angeles, Cal.	15 29	Saums, Chas. D., Jackson, Miss.	2 2	Trapp, L. A., Toronto, Canada	*8 15
Nonuma, Chas. J., Los Angeles, Cal.	5 10	Savary, W. H., N. Plainfield, N. J.	*24 51	Trexler, C. F., Richmond Hill, N.Y.	2 2
Ochsner, Dr. B. J., Durango, Colo.	6 15	Sayre, H. S., Annapolis, Md.	7 15	Tucker, Ervin A., Kirkwood, Mo.	2 4
Omang, Mrs. B., Honolulu, Hawaii	2 4	Schaefer, Otto S., Princeton, N. J.	5 7	Tucker, Leslie, Toronto, Canada	2 2
Ono, Donald S., Honolulu, Hawaii	2 4	Schiermer, Gordon R., Hayward, Cal.	2 3	Tucker, Mrs. M. F., Chicago, Ill.	6 7
Oppelt, Thomas M., Orange, N. J.	2 2	Schick, Peter M., Wilmette, Ill.	4 4	Turner, B. G., Los Angeles, Calif.	3 5
Oquendo, Rachel, Chicago, Ill.	7 15	Schlegel, Lillian, Fleetwood, Pa.	6 8	Ullrich, Susie, Yakima, Wash.	3 5
O'Toole, James J., Chicago, Ill.	3 5	Schmiedell, Doris, Carmel, Calif.	2 5	Underwood, A. M., Rochester, N.Y.	3 5
Otto, A. B., Berkeley, Calif.	6 9	Schmidt, O. E., Elmwood Park, Ill.	5 12	Vallet, Vernon H., Altadena, Cal.	2 5
Owens, Mrs. E. P., Riverside, Ill.	2 3	Schneider, Ethel B., Chicago, Ill.	2 4	Vanden, Frin, Chicago, Ill.	28 74
Owens, Mary E., Toronto, Canada	7 15	Schroeter, C. W., Vancouver, Can.	7 12	Vanden, Geo. W., Chicago, Ill.	*25 48
Padua, J. E., Los Angeles, Calif.	4 7	Schuelker, T. H., Liverpool, N. Y.	2 2	Van Raalte, Ben, New York, N. Y.	5 6
Palmer, Iva Bell, Evanston, Ill.	4 7	Schwartz, Pearl E., Chicago, Ill.	21 48	Vignale, A., New Toronto, Canada	6 12
Parker, Arthur, Western Springs, Ill.	26 55	Scott, Arthur J., Springfield, Mass.	4 15	Vipond, Jimmy, Trail, B. C.	5 7
Park, Martha E., Wheaton, Ill.	2 5	Sears, Paul, Toronto, Canada	2 5	Vogan, Sam J., Toronto, Canada	*25 55
Parker, Alton J., Rochester, N. Y.	2 4	Seckendorf, Jos., Jamaica, N. Y.	5 9	Vorst, Raymond K., Teaneck, N.J.	2 3
Parker, Geo. W., Bloomington, Ill.	4 5	Seldridge, Hy., Honolulu, Hawaii	15 20	Wahlman, J. Phil, Chicago, Ill.	3 5
Parker, Louis J., Rochester, N. Y.	7 19	Sermering, W. A., Syracuse, N. Y.	4 8	Walgren, Mrs. C. R., Chicago, Ill.	20 41
Parlin, R. G., Minneapolis, Minn.	2 2	Servino, E. P., Hollywood, Calif.	5 10	Walker, J. D., New York, N. Y.	3 8
Patterson, Dr. W. J., Paduca, Cal.	2 2	Shaffer, Marica, Akron, Ohio	4 8	Ward, M. E., Los Angeles, Calif.	3 8
Peak, R. and J. A., New Orleans, La.	2 2	Shamel, R. A., Cleveland, Ohio	2 3	Ward, V. E., Angels Camp, Calif.	10 33
Peak, Wm. A., Galesburg, Ill.	2 2	Sharpe, D. H., St. Catharines, Ont.	2 8	Wasser, George L., Brooklyn, N. Y.	2 2
Peck, Adelaide K., Chicago, Ill.	3 5	Shaub, M. S., Northampton, Mass.	3 6	Watson, Geo. P., Burbank, Calif.	3 5
Peck, Katharine, Chicago, Ill.	4 5	Shaw, W. C., Jr., Phoenix, Ariz.	2 2	Weber, N. E., Bowmansville, Pa.	5 5
Peck, R. James, Somerset, Eng.	3 6	Shea, Art E., Dayton, Ohio	25 30	Weber, Rennie L., Chicago, Ill.	5 10
Pearl, W. T., Tulsa, Okla.	2 2	Shearman, W. C., Los Angeles, Cal.	2 7	Weidenteller, J. D., Broadview, Ill.	4 4
Pearson, G. S., Honolulu, Hawaii	2 2	Shepard, Martha, Toronto, Canada	2 7	Weidrich, H. C., Buffalo, N. Y.	7 13
Pearson, Emil, Red Granite, Wis.	2 2	Shopley, Oliver C., Baltimore, Md.	2 2	Wells, Frederick C., Chicago, Ill.	4 4
Peckins, Chas. E., Washington, D.C.	2 4	Shoklaske, L. F., Riverside, Ill.	5 6	Wells, Joseph C., Chicago, Ill.	2 2
Perry, Jacqueline, Honolulu, Hawaii	7 8	Shrader, J. J. S., Glenmore, Pa.	8 13	Welty, Chas. H., Chicago, Ill.	4 7
Petersen, Harry, Jr., Lansing, Can.	2 3	Sickels, H. A., San Francisco, Cal.	6 8	Welty, Mrs. R. V., Chicago, Ill.	21 45
Petersen, Wm., Weehawken, N. J.	2 3	Sicora, R. G., Minneapolis, Minn.	6 17	Westman, Roy W., Chicago, Ill.	8 14
Pett, Dennis W., Bloomington, Ind.	3 7	Silberstein, B. G., Cincinnati, Ohio	*2 4	Whipple, Roy A., Winnetka, Ill.	6 10
Pfeiff, R. L., Troy, N. Y.	7 13	Simmons, G. C., Pullman, Wash.	3 4	Whitbeck, E. L., Pittsford, N. Y.	2 5
Phillips, T. P., Santa Barbara, Calif.	2 2	Skope, A. C., Bayville, N. Y.	5 10	Whitcomb, Edwin B., Altun, Ill.	9 13
Plichter, L., Eureka Springs, Ark.	2 2	Slowa, Casimir, Green, Ill.	12 16	Whitehead, J. C., Leeburg, Pa.	2 4
Pluta, Louis W., Chicago, Ill.	3 5	Smolney, Mrs. S. D., Chicago, Ill.	5 5	Whitely, Mrs. T., Julian, Calif.	*20 56
Pochman, R. A., Milwaukee, Wis.	2 2	Smolney, Wm., Chicago, Ill.	4 8	Wike, John H., St. Paul, Minn.	6 6
Pomeroy, Dr. R. D., Seaside, N.Y.	16 28	Smith, C. C., Hamilton, New Zealand	6 8	Wilson, H. L., Carbondale, Ill.	2 2
Porter, E. R., San Francisco, Calif.	3 10	Smith, Chester A., Pittsburgh, Pa.	2 3	Winning, Paul, Evanston, Ill.	2 4
Postlethwaite, H., Washington, D.C.	4 8	Smith, Cyril F., Dartmouth, Canada	21 38	Wittman, N. E., State College, Pa.	3 4
Pozzani, P., San Francisco, Calif.	4 8	Smith, E. S., New York, N. Y.	7 14	Wolf, Howard A., Chicago, Ill.	3 5
Pratte, Dorothy, St. Louis, Mo.	*7 4	Smith, Emmett E., Mill Valley, Cal.	2 2	Wolf, Paul J., Hawthorne, N. Y.	25 49
Pratte, Paul K., St. Louis, Mo.	*4 6	Smith, Foster, R., Palo Alto, Calif.	2 2	Wolfe, Mr. & Mrs. S. N.Y., N.Y.	2 2
Priest, E. M., Cleveland, Ohio	4 6	Smith, John E., Santa Ana, Calif.	2 5	Wood, Wendell W., LaCrosse, Wis.	2 2
Price, Dr. R. W., San Francisco	2 5	Smith, Helen W., Long Beach, Cal.	2 2	Woods, David, Toronto, Canada	3 6
Prince, Florence L., Chicago, Ill.	3 5	Smith, Lowell, San Jose, Calif.	3 4	Wright, Cliff, Halifax, N.S.	4 8
Proctor, Frank, Phoenix, Ariz.	15 32	Smith, R. C., Port Huron, Mich.	4 6	Wright, Peggy, Halifax, N.S.	2 2
Purves, B. G., Glendora, Calif.	8 15	Smith, Richard H., Glendale, Calif.	2 3	Wright, R. B., Pasadena, Calif.	5 4
Putnam, T. W., Grand Rapids, Mich.	27 65	Smith, R. J., San Diego, Calif.	2 3	Wussow, G. C., Milwaukee, Wis.	22 42
Putnam, W., Grand Rapids, Mich.	22 42	Smith, Dr. S. W., Salt Lake City	24 62	Yee, Esther C., Washington, N. D.	6 8
Rabe, Helen C., Chicago, Ill.	6 11	Smith, Wells W., Salt Lake City	3 5	Young, Asa L., Pittsburgh, Pa.	5 5
Rabe, Rolland, Los Angeles, Calif.	4 10	Snell, Dr. C. A., Toronto, Canada	19 25	Young, H. O., Kamploos, Canada	5 12
Rabin, Gary, Los Angeles, Calif.	2 5	Super, R. W., Port Arthur, Canada	19 25	Young, P. W., Minneapolis, Minn.	11 18
Ramsley, Ed. J., Bushank, Calif.	2 5	Suorens, Erik, Chicago, Ill.	9 14	Yuen, Joseph, Honolulu, Hawaii	3 6
		Soale, Mildred, Hillsdale, N. Y.	4 4	Ziegler, James G., Berkeley, Calif.	3 5

YOUR CLUB NEEDS A COLOR COURSE

John G. Mulder and
Charles A. Kinsley

A FEW YEARS ago most people joined camera clubs for the sole purpose of discussing and exhibiting pictorial black-and-white prints. Today, thousands of avid photographers are embracing additional interests. Color, nature, press, documentary, and technical photography have attracted many new hobbyists.

These newcomers, as well as the old-timers seeking new activities, are asking for help. The logical place to find it is in the camera club. Magazine articles and books may provide excellent reference material and instruction but for the personal exchange of ideas, the fellowship of a camera club is tops.

The largest group of newcomers has been in the field of pictorial color photography. Witness the mushrooming of color clubs throughout the country, the increasing number of exhibitions showing color transparencies and prints, and the many people taking part in the PSA Color Division services, benefits, and activities.

Here is fertile ground for a vigorous club. These people want and, in most cases, need instruction. It's true, they may become experts without it but they will learn much quicker and with less confusion if given the opportunity to participate in an organized class. The club automatically benefits. Clubs which have conducted classes in color photography have found a marked increase in attendance at color section meetings and in the number of transparencies and prints entered in club contests and exhibitions.



Use scenes like this one shot by late afternoon sun to illustrate the effect of color and lighting on mood. The extra warmth and the long shadows from the low sun accentuate the feeling of Autumn.



Try to include a farm in your next field trip. No other one location offers so many picture possibilities. Courteously approached, most owners will give you complete run of the place.

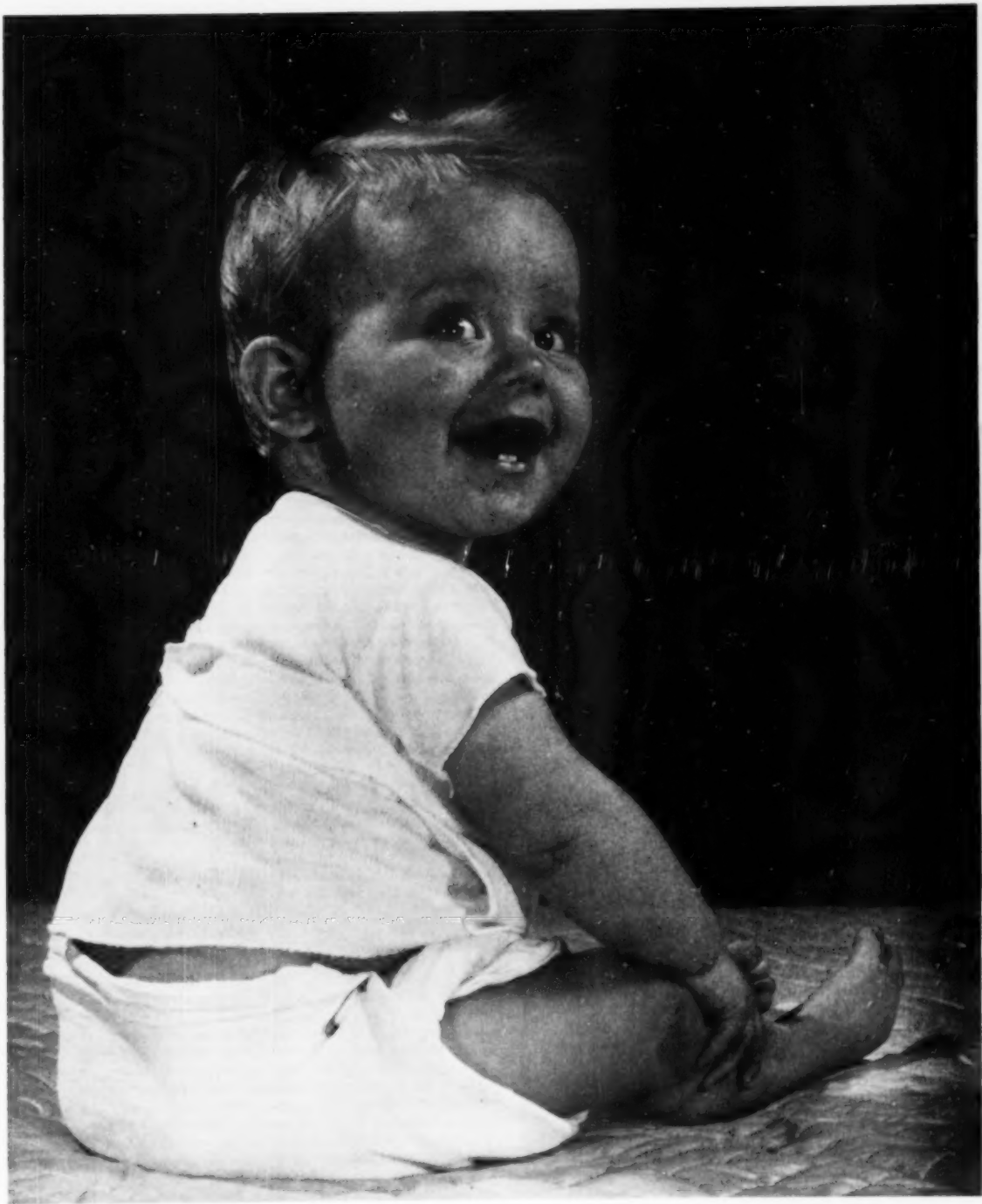
The purpose of this article is to describe how to organize and teach an elementary course in color photography. It is not possible in such limited space to more than touch on the methods used or the data which should be presented. However, a club member with ability and experience should be able to present a highly attractive and successful course by using this material for a guide and supplementing it with additional reading.

Course Objectives

The principal objective of an elementary color course should be to teach individuals that color photography is

fun. With major emphasis given to a study of equipment and materials for amateur use, proper exposure and composition, and choice of subject matter, a thorough coverage of all topics related to actual picture making is bound to result in improved pictures for the students completing the course.

An effort should be made to teach pictorialism throughout the course. There will be many students who do not care about pictorial photography as such, but they will learn quickly that the principles can be applied toward improving any type of photography. It is surprising how many converts are made in each class. Often students, who at the



Baby shots have universal appeal. A good instructor will supply the class with plenty of tips on holding attention, obtaining cute poses, and arranging the lighting so that it will be pleasing no matter how the baby twists or turns.



Use slides like this to point out the importance of placing figures in some scenes. Cover the two boys in this picture and note the loss in interest.

beginning of an 8-weeks' course are very poor photographers, in a year's time rate higher than the instructor in exhibitions and club competitions.

The course must at all times be kept elementary. Inclusion of too much technical data may frighten the beginner and result in a loss of interest and possibly lower enrollment for repeat courses. If the demand warrants it, more advanced courses can be given later on specialized subjects such as color print making, the history of color photography, a study of modern color processes, or similar material.

Course Organization

Since most club photographic courses operate as extracurricular activities with classes on evenings or week ends, it is highly desirable to establish a definite class schedule well in advance, to provide each student with this schedule, and then to adhere to it rigidly. Classes should be held no more frequently than once a week. Experience has shown that a successful beginning course in color photography can be given in 8 sessions. The content of each of these sessions will be discussed later.

Punctual attendance is an absolute requisite for a successful class. In order to insure that the students appear at the specified starting time, it should be announced in the first session that a 15-minute quiz will precede each lecture and will cover the subject matter included in the previous session. It should be made clear that grades from these quizzes, along with a final examination and slides submitted, will have heavy weighting in determining the final grade for the course. Since this beginning course is a prerequisite for others, it must be passed before the students can go ahead with advanced instruction.

The 15-minute prelecture quiz serves two purposes. First,

it gets the students to class on time. Second, if questions are properly chosen it provides the instructor with a measure of his own success in presenting material in the previous lecture. By correcting such quizzes promptly, it is possible to include in the discussion period on the following week a review of items leading to general misunderstanding.

The usual span of efficient attention is one hour. If the class begins at 7:00 PM, start the lectures promptly at 7:15 PM and declare a 15-minute recess at 8:15 PM. As a change of pace to provide variety, hold demonstrations and slide clinics from 8:30 to 9:30 PM. Have a definite understanding with the class that in no case will the session run later than this, although the instructor should be willing to stay later to answer individual questions.

So much factual information is necessary in a course on color that many instructors find it advisable to supply supplementary mimeographed notes covering the evening's lecture and giving specific data, including diagrams where possible. Since the student knows in advance that he will receive notes which fully cover the lecture, there are no delays while slow writers catch up, and each listener can relax while absorbing the greatest possible amount of information. Also, there is no misunderstanding as to how things were stated. Students should be encouraged to put these notes in loose leaf binders so that they can be referred to readily. Emphasis should be placed on how-to-do-it, rather than upon theoretical considerations.

Being mainly a lecture and slide-demonstration course, class size is regulated primarily by the meeting-place facilities. Assuming that projection and sound system facilities are adequate, the lectures can be given to 500 students about as well as to 5. Clinics, discussions, studio work, and field trips, however, demand personal attention and smaller classes are always desirable from that angle. A class of 12 to 15 students is ideal for one instructor.

Large classes require competent assistants. Lectures can be given by the head instructor to the entire assemblage but the other activities should be restricted to not more than 15 students per assistant for adequate supervision and attention.

A good set of slides, preferably made by the instructor, will assist greatly in illustrating important points. Where possible, these should include both the wrong way and the right way to make the exposure.

Material can be borrowed from other sources to supplement that available in the instructor's files. Valuable assistance can be obtained from manufacturers through their sales service and camera club service organizations. Sometimes the instructor can borrow friend's slides and have duplicates made.

The Instructor

Many camera clubs select instructors purely on the basis of their ability as photographers. This is an understandable but serious error. The first requirement of an instructor is that he be a teacher. If he does not have the ability to impart his knowledge to others, of what avail is it?

To be good, an instructor must understand human nature and enjoy working with people. He must be completely familiar with his subject, at ease in front of an audience, and have a reasonably good speaking voice. He must be able to organize and present facts in such a manner that they appear reasonable and logical and thus easy to assimilate and to follow in practice. Above all, he must be inspirational.

If the instructor is all this and a good photographer

too, then the students are fortunate. His experience as a photographer helps him to understand their problems and his ability as a teacher enables him to solve them. Not only will the information be presented to them in the best possible manner but they will be convinced that the system being taught is workable and conducive to success.

Guidance should not be to the extent of producing stereotyped photographers; that is, the instructor should allow sufficient freedom of expression and permit the students to exhibit their own individualities, thus putting character into their work. The instructor should build in each student a sound foundation suitable for future development and expansion.

Salary and Tuition

The instructor must be paid a reasonable fee for his services. A good instructor will spend at least two or three hours, and often more, in preparing each lecture, arranging slides, or even shooting comparison shots to illustrate a specific point. He can hardly be expected to put this much outside energy, plus actual teaching time, into a class simply for the love of photography.

On the other hand, it is not necessary to overpay an instructor. A good one will have a sincere interest in both photography and teaching and will be partially compensated by the satisfaction of helping others.

The size and location of the club and the size of the class will influence the pay rate, of course, but an average club should be prepared to pay from \$6 to \$12 for each evening's instruction. Per hour of teaching, this rate compares favorably with college level instruction.

Tuition is a variable factor, depending to a great extent on the size of the class. Some clubs attempt to make money on their educational program; others are able and prefer to subsidize part of it. In general it is usually best to break even on a course. All expenses, including salary, demonstration materials, mimeographing fees, publicity, etc., should be considered. The fee usually ranges from \$8 to \$15 for an eight-session course.

The Course

The following pages contain a breakdown of the subjects covered in each session of a typical eight-weeks' course in elementary color photography.

Session 1. Survey of purpose and scope of course, Discussion of color materials and characteristics, cameras, exposure, meters, and guides.

In the first class period it is a good idea to give the students a definite understanding of the objectives of the course and exactly how the class will be operated. They should be told that your aim as instructor is to teach them what subject matter will make an appealing color picture, how to compose such a color picture, and how to expose it, using their own equipment.

The various color film and print materials should be discussed in some detail. Explain the differences between reversal and negative materials, sizes available, and the purposes to which they are usually put. Panels of color prints and transparencies arranged around the room are important. Seeing the material while it's being described means a better understanding and longer retention of the characteristics of the products.

The subject of contrast and lighting for color photography should be introduced early in the course. Because it is desirable in color work to reproduce colors with full saturation, the gray scale contrast in a color reversal ma-

terial must be higher than in black-and-white films. As a result, scenes with high brightness scales cannot be fully recorded and detail must be sacrificed in either the highlights or the shadows, depending upon the exposure level chosen.

Emphasis should now be placed upon the extreme importance of correct lighting and exposure for color photography. Methods of using synchronized flash and reflectors in sunlight to reduce the brightness scale can be described briefly. These methods should be covered in more detail in a later session.

While discussing the characteristics of reversal color films, it is important to mention their relatively slow emulsion speeds, compared with black and white, and to disclose what this means in terms of practical use in the field. Depth of field, focal length of lens, speed of lens desirable, and using tripods are items which need mentioning.

Cameras should be discussed in some detail. The instructor should advise strongly that good equipment is important. For example, while a box camera can be used for making Kodacolor pictures in bright sunlight, its use is rather restricted and many good pictures will be missed. Most of the students will probably have miniature cameras of the 35mm or Bantam 828 size. An f 5.6 or faster lens is recommended.

It is important to impress upon the student the necessity for using fresh film and for storing the film properly before and after use. Photographic emulsions are sensitive to heat and moisture. Color films are composed of at least three emulsion layers, each of which may not resist deterioration at the same rate and as a result, a color shift can occur from improper storage. Ideally, all films should



The farmer's daughter, either real or simulated by one of the students, makes a pretty picture in a setting like this. Light colored surroundings act as natural reflectors to put needed light into the shadows.

be stored in a cool, dry place. This does not include most basements.

It is also important that film be processed soon after exposure. Delays in processing may cause desaturation of color and general haziness similar to fog.

Although color films must be exposed "on the nose" for proper rendition of color in highlight, middle tone, and shadow areas, it is nevertheless relatively easy for the beginner to make the proper exposure if he follows a few simple rules, such as the following:

1. Expose for the motif (principal object).
2. Expose so as to record detail in the highlight of the motif.
3. Fill in the balance of the motif if necessary by use of reflectors or flash.
4. Follow explicitly the manufacturer's instructions packed with the film.
5. Make the necessary adjustments for side lighting, back lighting, light and dark subjects, etc.

Successful training in determining the proper exposure for color film has as a must the keeping of notebook records. This is important because not all shutters operate exactly at the speed indicated and some cameras require slight adjustments under certain conditions compared with the apparent exposure on the basis of manufacturer's recommendations for the film.

Improper use of a meter can lead to poor results. Therefore, explicit instructions should be given to those who intend to use meters and this should include lessons on how to use a reflectance gray card with a meter for determination of exposure. Some of the important points to stress are:

1. Point the meter at the motif and read the light reflected at camera angle.
2. Read both highlight and shadow to determine whether fill-in is required.
3. Exclude the sky.
4. Determine the relationship between meter, camera lens and shutter, and film.
5. Disregard high and low readings.

It should be emphasized to the student who uses exposure guides other than meters that one full stop additional exposure is required for hazy sun, compared with brilliant sun, while an additional full stop is necessary for cloudy bright skies and still another full stop for cloudy dull skies. When these relationships are learned and the basic exposure for the film-camera combination is known, automatic determination of exposure becomes easy.

Above all, the instructor should teach his students to *THINK* about exposure and not to rely blindly upon mechanical gadgets.

Session 2. Discussion of subject matter, composition, and harmony. Slide criticism.

A change of pace in any class is essential to reduce the risk of boredom. In this second session the instructor should aim to avoid any discussion of the cold, albeit necessary, facts of exposure, keeping, reciprocity law failure, latitude, etc., which were covered in the first lecture. This night is to be aesthetic—one to impress the students with the beauty and worthwhileness of shooting color. This is the instructor's one big chance to bridge the gap between snapshotting and pictorialism.

Session 2 could be introduced something like this:

"The ageless question, 'Is Photography Art?' will never

be answered satisfactorily in this or in any other class—the answer is a matter of personal opinion. However, the declaration that photography is *an* art is indisputable. Though lenses be ground, cameras assembled, and emulsions coated by mechanical means, the skillful use of such tools represents an art. A thousand-dollar camera is worthless in the hands of an incompetent user while many highly successful pictures have been made with box cameras in expressive hands.

Photography is a particularly valuable hobby. It stimulates thinking and opens the eyes. The photographer enjoys patterns, graceful trees, cloud formations, architecture, photogenic features, shadows, snow, rain, fog, dust. He sees beauty in ugliness, watches the changing light, injects composition and harmony into every view, looks for quality from morning until night. He has a zest for living unequalled by any other type of individual.

"You can create with photography. Its possibilities are unlimited. Through this means you can, if you will, express yourself and your individuality as well, if not better, than you can by other mediums such as music, writing, painting, etc. To a photographer, Karsh portraits, Oelman nudes, Hurrell glimmers, or Steichen documentaries are unmistakable. If your interest continues, you will develop a technique so surprisingly your own that your work will be recognized easily by the way you compose and handle your subject matter."

Perhaps you feel that this is a pretty high plane on which to start an elementary course in color. It really isn't. Your students are paying their money to be something more than snapshotters. They want to be pictorialists, to make their pictures picturesque. Give them something to shoot at.

This lecture should be profusely illustrated. It's much easier and far more graphic to discuss the choice of subject matter by "talking from slides" than by simply talking. Emphasize simplicity and originality. Avoid using slides made in South Africa, Greenland, or any other locale not readily accessible to the majority of the class. Point out the many opportunities for finding picture ideas in areas close at hand.

Establish the relationship of subject matter to composition and how they complement each other. Enumerate the basic rules of composition (there are dozens of books and articles you can use as source material; see the bibliography at the end of this article for suggestions) but be quick to point out that they should serve only as guides. Photographers must not be bound by convention. You will do your students an injustice if you attempt to make them all think and act alike.

So far, the discussion could apply either to color or black and white. One very important additional consideration in color photography is color harmony. Students should be provided with some sort of color chart or wheel and introduced to such terminology as analogous, triadic, complimentary, and monochromatic color harmonies. A few examples should convince them that some subjects are not suitable for color photography simply because of a bizarre combination of colors, while certain other subjects are practically "made" through the use of beautiful color contrasts.

Close this session by projecting and criticizing a few slides, carefully chosen to illustrate subject matter, composition, and color harmony. If possible, show a few which have had exhibition acceptances and which contain all three elements in good balance. Encourage the students to participate in the discussion. Ask leading questions and force

them to commit themselves on whether or not they like a particular slide and why. Some of the answers may not sound very intelligent but the important thing is that you have stimulated thinking.

Session 3. Field Trip.

Conducting properly, a field trip can be the high spot of the course. Away from the formal air of the classroom and filled with expectancy, the students are friendly and eager to learn. And on a successful trip they can be taught:

1. How to recognize and where to find photogenic subject matter.
2. How to photograph people, pets, flowers, architecture, marines, scenics, patterns—in short, practically anything.
3. How to use fill-in flash, reflectors, filters, close-up attachments, and other accessories.
4. How to compose, arrange subjects, add props, pose figures.

In what other one session can you teach them so much?

Don't make the mistake of inadequate preparation. Conducting a field trip is not hard, but without careful advance planning, it can easily result in failure. Imagine yourself with twenty people crowded around you, cameras in hand, expectantly inquiring: "What next, teacher?" If you haven't already determined what's next, you'll find that, unfortunately, ideas seldom crop up on the spur of the moment. Even the most experienced instructor can break out into a cold sweat trying to figure out the next step.

Plan the complete itinerary in advance. Make out a time schedule and check each proposed setup a few days in advance. Avoid too much time on any one particular type of photography. Include both urban and rural locations. There are always enough cars available to provide transportation.

Students should be informed in advance of all the details. Describe accurately what weather conditions will force cancellation of the trip. Although many fine pictures have been made in the rain or fog, few field trips are successful unless the day is clear or but slightly hazy. Be careful when the sky is full of heavy clouds. Time can drag slowly between periods of sunshine.

Pretty girl models are a must for the trip. They need not be professionals—often the students themselves will do nicely. Clothing should be light and pastel, with a few brilliant accessories.

When the group has assembled, methods of reading meters and using exposure guides should be explained and basic exposures established. While making setups, the instructor should explain why the subject matter is appealing, why props are needed, why a certain angle of view is better than another. Students should be encouraged to make comparison shots using filters, reflectors, flash, or any other aids to better photography.

Session 4. Slide and print clinic. Discussion and demonstration of portrait make-up, posing, and lighting, and table-top photography.

One of the best stimulants for backward students is the clinic. Operation of the clinic is simple: Each student is directed to submit 2 or 3 of his best slides or prints. Each entry is discussed quickly but thoroughly for subject matter, composition, and technique, the instructor serving as moderator for an open class discussion.

A good instructor can learn a lot about his students and teach them at the same time during the clinic. As each slide is projected or print viewed, he will ask leading ques-

tions about color, exposure, focus, interest, composition. Do the students like the picture? If so, why so—if not, why not? Does the picture arouse any feeling? Can it be cropped or altered or remounted in its present form to make something better? Would it be worthwhile to reshoot the same or similar scene? Is it a plain snapshot, a good record, a documentary, a pictorial? Does it have a chance in an exhibition as it is now?

Asked at random, these questions will keep the class thinking every minute. Not knowing who will be called on next, the students will analyze every picture, trying to discover both strong and weak points. You'd be surprised how quickly even the slowest student, after a session or two like this, learns to express an intelligent analysis.

A forty-minute clinic is probably enough for the average class. Let them stretch for a few minutes and then proceed to the lecture on portraiture.

It's wishful thinking to plan on covering portraiture at all adequately in one session. The best you can hope for is to present the fundamentals graphically enough so that a conscientious student will retain sufficient information to enable him to make a decent portrait without fear of wrong lighting or posing. The finer points of top-notch portraiture will comply only with diligent practice.

Make-up is a natural starting place for a lecture on portraiture. Select a few good references and insist that they be read. In the time allotted, you can't hope to give a complete lecture on, let alone demonstrate, the art of applying make-up. The students should understand this and should realize that if they intend to pursue formal portraiture with any degree of seriousness they must do some background reading. Suggest that they read from such publications as the Kodak Data Book, "Ektachrome and Kodachrome Professional Films," and "Home Portraiture and Make-Up" by Maurice Seymour and Syd Simons. Good articles include "Color Make-Up for Kodachrome Photography" by S. G. Hall in the June 1940, issue of *Studio Light*, "Make-Up for Color Photography" by Max Factor, Jr., in *Mimicam Photography*, January 1946 and "Putting Your Best Face Forward" by Bud Westmore, *PSA JOURNAL*, July 1947.

Ideas about make-up have changed in the past few years. Except for professional modeling, ordinary street make-up, neatly applied, is quite satisfactory. Beards should be discussed, ways to cover blemishes illustrated, and make-up for children covered.

Posing is better demonstrated than talked. A paid model would be best, but if the budget won't allow it, class members are quite satisfactory. The model then should be replaced frequently so that he or she will be able to watch most of the demonstration.

Posing is a pretty broad topic and depends a great deal on the subject. The basic ideas, however, can be explained in a few minutes. Angle of the body, back arch, tilt of the head, line of the shoulders, glamour, formal, informal, old people, youth, children—you'll not have any trouble in finding enough to talk about!

The lighting story should start with a discussion of light sources for color photography. Since very few people have room or money for professional equipment, the demonstration should be carried out with inexpensive reflectors and lamps. Explain in some detail the purpose of the main or key light, the shadow or camera light, and the hair and background lights. Turn them on one at a time, then all together for the finished effect.

Point out that there are an infinite number of lighting setups, all based on a very few and simple arrangements.

Emphasize that about 99 per cent of all sittings can be made very successfully with just a couple of setups. Once these setups have become automatic, the photographer is free to concentrate on pose and expression. Convince your students that the subject's features, pose, and expression are far more important to the success of a portrait than any clever, unorthodox, or world-shaking arrangement of lights.

A simple but very effective setup is the one commonly called "three-quarter" lighting. It's fairly foolproof. The main or key light is easily positioned by observing the nose shadow. Start with the light two or three feet above the level of the subject's head and at about 45 degrees from the camera-subject axis. Move the light up or down and left or right until the tip of the nose shadow just barely touches the corner of the mouth.

Use the camera light 50 per cent further away and close to the camera. Add a hair light (a little light spilling on the shoulders and sometimes even on the forehead is perfectly all right) and possibly a background light and you have an arrangement that will work on most anybody.

Three-quarter lighting is most commonly used with the plane on the subject's face approximately at right angle to the camera axis. One interesting variation is to turn the subject's head away from the main light—not quite to a profile—and add an extra light from the rear to produce pleasing highlights along the edge of the face. It's pretty good for both men and women. Seems to put vivacity in a woman's portrait, strength in a man's.

Be certain to close this part of the lecture with a reminder that practice is the important thing in portraiture. Light distances and exposure should be recorded and returned transparencies studied for faults. Try some variations—then standardize on the best.

A discussion of table-top photography must of necessity be rather general. Originality and creativeness are such important factors in table-top work that any suggestions

by the instructor are bound to be abstract in nature. About all he can do is to impress upon the students' minds the fact that a collection of statues or cute objects seldom constitutes more than mere props for a record photograph. A pictorial slide must create appreciation for a story told, acceptance of an idea presented, or admiration for the use of skillful composition or lighting.

Most table-tops are lighted rather simply. Generally speaking, the same types of lighting apply to both portraiture and table-top work. Exposure can be determined from meter reading or exposure guides.

A demonstration of table-top photography should include the use of supplementary attachments such as the Kodak Portra Lenses, framing devices for close-up work, and 35mm or Bantam 828 adapter backs for view cameras. If available, a few slides should be projected to show the type of material being accepted in exhibitions.

Session 5. Studio Work Night.

Students should be reminded in the previous session to bring cameras and tripods for this work session. If there are more than ten or fifteen students in the class, assistants should be provided and the class split into two or more groups. After a brief review of the principal points covered in the last lecture, the class should proceed to make lighting arrangements under the instructor's guidance.

A simple flower arrangement will prove satisfactory for table-top practice. For portraiture, outside models are best. These can be secured at reasonable rates from art schools or if the cost is not a prime factor, from modeling agencies. The instructor should make sure that the more backward students have an opportunity to help arrange lights and pose the model.

Session 6. Tips on selling pictures. Demonstration of gadgets and accessories. Filters. Flash and night photography.

Most amateur photographers are stimulated by the sale



Beginning students in color photography should be taught to use simple lighting arrangements. The three-quarter set-up illustrated here will produce effective photographs with a minimum of trouble.



Supplementary sessions can include trips to portrait or commercial studios. Some of the best illustrative photographers only use three lights arranged as simply as shown here.

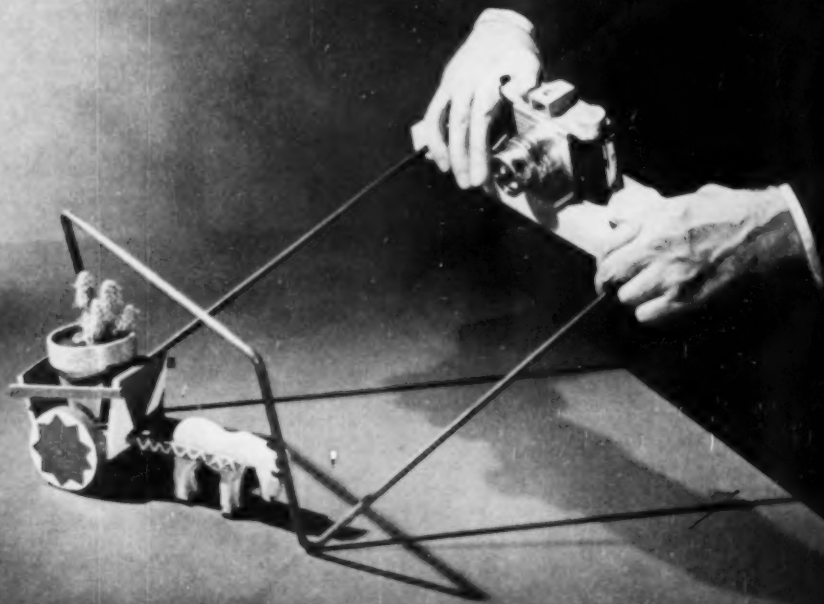


Table-top and flower photography often require supplementary lenses and framing devices for close-up work. The home-made focal frame shown in use here determines focus and view-finding problems automatically.

of an occasional picture. Sometimes it helps to buy some extra equipment. The students should realize, however, that it's not an easy matter to sell photographs. Expert professionals whose living depends on selling pictures are tough competition.

It is a good idea to review picture markets printed in various photographic publications and to point out to the students what kind of pictures are wanted, where to sell them, what prices are paid, and what size transparencies can be handled by purchasers. Very few advertising agencies can use color transparencies smaller than $2\frac{1}{4} \times 2\frac{1}{4}$ " and most prefer $3\frac{1}{4} \times 4\frac{1}{4}$ " or 4×5 ".

In this session a few loose ends can be tied together, including demonstrations of special gadgets such as developing tank for processing color film, color correcting filters and their use, changing bags for sheet film, film septum holders, tripods, background cards, lights, reflectors, etc. Since many of these pieces of equipment will have been used in demonstrations and on field trips, only a review may be necessary.

Although the majority of successful color shots are made without filters, there are times when a filter is neces-

sary for best results with transparency materials. Color films are manufactured to give quite accurate color rendition at a certain color temperature and any change in this color will produce inferior results. Open shade, overcast days, and various artificial light sources are common variations from normal lighting conditions. The instructor should discuss and show slides illustrating these affects and how to correct for them by using filters.

Few people realize how many color correcting filters are available. More than twenty manufacturers produce color filters. The largest of these, Eastman Kodak Company, stocks more than 50 Light Balancing, Color Compensating, and Wratten Filters for color photography, many of them available in quite a variety of sizes and forms. Fortunately, literature is available from the manufacturers giving suggestions on how to use color filters and the problem is not at all complex. Each filter has specific recommended uses and the manufacturer's recommendations should be followed.

Sometimes it is possible to reclaim slides with off-balance color by mounting with the slide a piece of one of the color correcting filters purchased in the form of filter gel.

A contrasting color is used to minimize an all over effect (for example, a slightly blue slide can be somewhat neutralized by using a yellowish filter). Any one particular color can have its effect emphasized by using a filter gel of the same color. These results are impossible to predict. A few examples projected on the screen will illustrate the point.

Since practically all cameras manufactured today are equipped for flash photography, a course in color photography would hardly be complete without a discussion of the use of flash equipment, both as the sole source of illumination and as supplementary illumination for day-light. Guide numbers should be explained, and professional methods of using tungsten lamps and meter readings for complicated setups described.

The experience of the instructor will prove helpful at this point in explaining why certain combinations of flash-lamps and films are desirable. For example, clear flashlamps with films balanced for tungsten illumination is a combination much to be preferred over blue lamps with daylight type films because of the exposure advantage resulting from the greater light emission of clear lamps and the higher emulsion speed of the tungsten type films. Also, clear lamps cost less than blue-coated lamps.

The instructor should stress that single flash photography is not usually of the highest quality and should be resorted to primarily for weddings, parties, and other occasions where it might not be practical to arrange floodlamp lighting. Single light sources are seldom pictorial.

Outdoor night photography can be discussed in a few minutes. It is mainly a problem of recognizing first, what makes a suitable subject; and secondly, what exposure should be given. Average exposure levels can be suggested for some typical scenes but it should be made clear that there is quite an acceptable range. One of the best ways of presenting this subject is for the instructor to make some exposures in advance of locations familiar to the students and use these slides as examples. You'd be surprised at how religiously the students will note the exposures. Most of them have tried night scenes at one time or another but very few of them can remember what exposure to use. They will welcome a guide.

Session 7. Field trip.

A second field trip should produce more exciting results than the first. The students have had experience by this time and are capable of better work. To avoid losing their interest, the instructor must work out a route which will include new and different subject matter. The first trip may have covered flowers, landscapes, winding brooks, close-ups of models, etc. The second one might well include opportunities for architectural patterns, angle shots, reflections, or anything else a little bit unusual or original.

Session 8. Final examination. Judging and criticism of student's work. Discussion of club and PSA activities. Encouraging exhibition participation.

A written final exam serves as a grading guide, a stimulant for review, and a means of determining how successful the instructor has been in presenting the material so that it will be retained. The exam should be preceded by a brief question-and-answer period to make certain that all misunderstandings are cleared up. About twenty-five questions of the true and false, multiple choice, and completion type take the average student twenty minutes to answer, give a fair estimate of his knowledge, and can be corrected quickly.

The last session seems to be one of the most interesting of all. The major reason probably is the competitive judging and analysis of slides. To give the class a fresh viewpoint and to avoid any possible feeling of prejudice, bring in three outsiders to serve on the jury. These may be other club members, artists, or portrait or commercial photographers. At least two of the three should have some experience in shooting pictorial transparencies.

Judging is conducted much like accepted exhibition practices to give the class the "feel" of participating in a real exhibition. If possible, use an electric voting machine with colored lights so the class can watch the voting. After the initial weeding-out process, have the judges discard their switches and by consultation select a few winners and several honorable mentions.

After the judging, the jury is invited to comment on the slides. They usually indicate why they liked the winners and then for as long as they have time, tell why the other slides didn't make the grade. Some of their remarks will differ from the opinions expressed by the instructor at previous sessions. The students should be warned in advance that since slide criticism is such a personal matter this might easily happen and is really a healthy situation.

After the judging comes the instructor's farewell speech. No camera club course would be complete without a discussion of what lies ahead for the graduate. Now that he has completed an elementary course in color photography, what's the next step?

The answer, of course, is participation in club meetings and contests, PSA Color Division activities such as slide circuits, slide study groups, instruction sets, and competitions, and competition in nationally recognized salons and exhibitions. Describe these activities in some detail and explain how to go about entering.

It is at this point that the instructor's enthusiasm for color work becomes most important. This is his last opportunity for close contact with the individual members of the class and his sincerity and eagerness may encourage many to continue in color photography. That's why it was stated earlier that one of the main requisites for an instructor was considerable experience in color photography. Unless he has been up to his neck at some time or other in these activities, he will not be able to sell the students on the fun of participating in them. If he does sell them—the course has been successful.

References

A great many articles and books on color photography have been published. The articles are so numerous that it would be extremely difficult to select a restricted number. The following list includes books which should prove helpful to the beginning student taking an elementary course in color photography. The last four are excellent reference books for the serious worker.

1. "Kodachrome and How to Use It," Ivan Dmitri (Levon West). Simon and Schuster, New York, 1940.
2. "Kodachrome and Ektachrome from All Angles," Fred Bond. Camera Craft Publishing Co., San Francisco, 3 Ed., Sept. 1947.
3. "Ektachrome and Kodachrome Professional Films," Eastman Kodak Company, Rochester, N. Y., 1948.
4. "Kodachrome and Kodacolor Films," Eastman Kodak Company, Rochester, N. Y., 4 Ed., 1949 printing.
5. "History of Color Photography," Joseph S. Friedman. American Photographic Publishing Co., Boston, 1944.
6. "Natural Color Processes," Carlton E. Dunn. American Photographic Publishing Co., Boston, 4 Ed., 1945.
7. "Colour Photography in Practice," D. A. Spencer, Pitman Publishing Corp., New York and London, 3 Ed., 1948.
8. "An Introduction to Color," Ralph M. Evans. John Wiley and Sons, Inc., New York, 1948.

The Pictorial Spider Web

BERTHA S. TOWNSEND



Spider Web number 5, from a 35mm transparency, has had 22 acceptances in international exhibitions. The exposure was 1/10th second at f/8.

SPIDER WEBS have fascinating pictorial possibilities for the color photographer.

The web of the geometric spider is a work of art and a marvel of ingenuity and engineering. It often makes an interesting subject even without the spider. This is especially true when the spider has unwittingly provided a beautiful framing. Then you wait for the weather to supply the necessary moisture condensation and the early morning sun to give the sparkle, and you have a fine photographic opportunity. A projected color transparency comes nearer duplicating the jewel-like sparkle of the dew-spangled web than any other type of photography.

Some spiders seem to have an eye for beauty in the choice of surroundings for their webs. Such webs can

usually be worked into a pleasing composition. After finding the right composition, lighting becomes an important consideration. Here it will be best to select webs located flatly or only slightly obliquely to the sun and against a medium or dark background.

Spiders and their webs are most numerous and at their best in August and September. It is then that the colorful garden spider or grass spider is found in the center of the web. A cold night, after a season of hot, humid weather will condense globules of moisture in sufficient quantity and size to stand out against the rising sun. This may occur at any time during the summer or early autumn. When the low bushes and tall grasses are particularly "dewy," then the photographer must be out web hunting before sun up. After choosing a web, he should set up his camera, carefully compose his picture, focus very sharply and critically, and be ready for the light reading when the sun comes over the horizon.

Equipment

A good choice of camera for the photographer taking spider webs and other nature close-ups is a Zeiss Maximar with a 135mm Tessar f/4.5 lens, equipped with an Eastman 35mm color film adapter. A fairly rigid tripod is a must. The early morning light readings are quite low, sometimes as low as 50 or 75 foot candles on the Weston meter.

Spider webs are very delicate and sensitive to the least breath of air; it is surprising how much motion there is in the web in the calmest of mornings. This means that an exposure cannot be given the necessary time to insure good



Early Morning Web number 14. Exposure was f/12.7 at 1/10th second. The photographing of spider webs takes a great deal of patience but the results in color are well worth the trouble. Best results are obtained early in the morning after a cool night following a hot humid August or September day.



BUBBLES

Ted Bokor

depth of field, but must be a compromise between time that is fast enough to stop any very slight motion and an aperture small enough to include the web and close foliage in sharp focus. This stresses the necessity for choosing a web with a flat background, either far enough away to be completely out of focus, or near enough to be included in the depth of field. Usually these shots are made $1/10$ th second at $f/8$ or $f/9$. Artificial backgrounds can be used, but are not necessary if it is possible to choose from a large variety of webs.

Increased Light

As the sun rises higher in the sky, the meter may register from 100 to 250 foot candles. With these readings faster time settings and smaller apertures can be used, such as $1/10$ th second at $f/11$ or $1/25$ th second at $f/11$. The result is more contrast between web and background as well as more depth of field.

When the time setting and f -number have been chosen, the shutter cocked, the film dropped into place and the lens shaded against the direct rays of the sun, then comes the time of patient waiting until the web shows the least possible motion. Watching the web and the lens at the same time is the most tricky step of the entire procedure. It is wise to take several shots, checking the light reading each time. Then if the photographer is lucky, he may have a pictorial slide of exhibition possibilities or perhaps two.

The shooting period is of short duration because as the sun rises it quickly dries the dew off the web. The pictorial quality of the web is then lost and the photographer must turn his attention to the many other subjects that photograph best in the bright, day-long sun. It may be days, weeks or months before the weather and the spiders co-operate again to invite web hunting with the color camera.

Portraits in Color

HARRY HAIMES

CAREFULLY planned home portraiture can be a fascinating phase of color photography. A great deal of personal satisfaction awaits you if you are willing to attempt a diligent and methodical venture into this field. Your decision to try this interesting work will represent a challenge to your skill as photographer and artist. Accept this challenge with a sincerity of purpose and you will have left behind you the first obstacle in your path.

Many enthusiasts of color photography have attempted portraiture without proper guidance. Their first attempts, unfortunately, were unsuccessful and as a result, they felt the field was too difficult and did not try again. A carefully planned, step-by-step procedure is a "must." The careful

and methodical worker will be repaid handsomely in his work by just a little more than the usual amount of planning.

You should, at the outset, understand that first you must achieve perfection in the handling of your equipment. Camera technique must be thoroughly mastered so that all your efforts may be directed towards the making of an artistic portrait. The successful portrait photographer strives for results which will have a spark of life and animation. The portrait which reveals something of the subject's character and personality will succeed. The mere recording on film of a good likeness is doomed to failure as an artistic effort.

Photographers, who have been successful with black and white portraiture, will need some additional knowledge to repeat the performance in color. There will be little opportunity after camera work for extensive cropping or for a series of darkroom treatments to achieve the final result. Such activity in color photography is not yet altogether practical for salvaging transparencies, and the black and white worker must be fully aware of this fact.

An understanding of color harmony and color arrangement is important, if you are to achieve pleasing results. Many people have an instinctive feeling in this direction. A background of art, designing, decorating and kindred fields give one an easier approach to the subject. For those who find it difficult to acquire the rhythm of color, a practical and simple procedure would be to study a "Color Wheel," obtainable at artists' supply dealers. It will prove to be an excellent guide in the handling of color arrangements.

Smooth handling of your subject will contribute to the success of your portraits, and, in this connection, you will find it helpful to study your model in advance of picture making. A friendly conversation will always reveal to the photographer many angles which can be used to good advantage later. Observe carefully the unusual and interesting mannerisms of your subject and make notes of your shooting plans.

Check carefully on apparel and props available for your pictures and make a list of the various items that will go well together for good color harmony. Avoid strong, exaggerated colors, particularly those that clash. Select soft, harmonious shades in good taste.

It is well to instruct your subject in advance with respect to make-up. The most satisfactory medium for color is pancake make-up in dry cake form. This is easily applied with a wet sponge or fingertips and distributes itself evenly. Choose a shade a trifle darker than subject's flesh tone. Where there are skin blemishes, a "Cover Mark" stick, obtainable at cosmetic counters, can be used to good advantage before make-up is applied. This precaution is important since retouching your transparencies is impractical.

Your home lighting equipment need not be elaborate. To operate efficiently, you should have two 500-watt bulbs in reflectors, one 500-watt spotlight and one 250-watt baby spot. This set-up of 1750 total wattage will operate smoothly in any home without fear of blowing fuses. Wherever possible, divide your connections between two outlets.

It is important that you use the proper illumination for the type of film in your camera. For Kodachrome 35mm and Bantam size, use regular photo floods. If, however, you are using other types of film, check the manufacturer's instructions packed with the film, to ascertain when it is necessary to use 3200 Kelvin lamps.

Would you like to try a session of portraiture in color? If you are ready, here is a fundamental lighting set-up which will start you off and give you a basic idea from which you can proceed further.

Place one 500-watt lamp in reflector about 5 ft. from subject to one side of your camera. This will be your main light. Bring it up to approximately 7 ft. in height and face it down at a 45 degree angle. This light will determine your exposure and is the light source towards which you should face your subject.

For a fill-in light, to illuminate shadow areas, place the second 500-watt lamp to the other side of your camera and raise it to the height of your subject. You then place



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Ted Bokor

this light approximately 3 ft. farther back from your main light. If you are crowded for space, you may leave the fill-in light at the same distance as your main light, provided you place a diffusion screen over it. Another acceptable procedure in this case would be to replace the 500-watt lamp with one of half the intensity.

Background lighting is important for indoor color work. For this purpose, you will use the 500-watt spotlight. Place it low, behind your subject, to keep it out of the picture area. The baby spotlight will be used for lighting the hair and its placement is optional.

You are now ready to make a portrait in color. Place the subject 5 ft. in front of your camera which is now in line with your main light. Be careful that you do not have any colored draperies or upholstered furniture too close to your subject. There is danger of reflected colored light kicking back into the picture area.

For close-up portraits with a 35mm camera, the ideal lens to use is the 85 or 90mm with which you will get good composition to approximately the waistline. If you are not fortunate enough to own a telephoto lens, proxors, carefully used over your standard lens, will be a great help. Your camera should, of course, be on a sturdy tripod since working with indoor color film will require long exposures.

You now turn on your main light and proceed to take a meter reading. Do not take your reading from camera position, as you might do in outdoor color work. Approach your subject and take a reading for the flesh tones, hold-



PATTY

Harry Haimes

ing the meter close to subject's face. Be careful you do not cast a shadow which will throw the reading off. Do not concern yourself with readings of apparel, accessories, etc. The most important area in the portrait is the flesh tone and proper exposure for the face will give an all-around satisfactory color rendition. Your subject must remain at the position at which the reading was made, when you make the final exposure. If the subject moves to a closer or farther position from your main light, you must take a new reading.

Turn on the other lights and proceed to pose your subject. From camera position give further instructions to your model, watching all the time for good expression and the right moment for making the exposure. When that moment arrives, prepare the subject with a prearranged cue, such as "hold it," then quickly trip the shutter. From the same position, try several poses for variety. A slight turn of the head will enhance the expression and give you another angle. Be careful not to tire the model by too long a session under the lights. Have a rest period after several exposures to help your subject relax.

The lighting set-up outlined is a basic one which should prove successful for most of your portraits. You may vary this for more dramatic effects, but always watch your shadow areas and be sure to have ample fill-in lighting to prevent these areas from going too dark.

When your first roll of "portraits in color" is returned from the processing plant, go over your transparencies carefully. Project your slides and make a study of results. Select several you like and enter these in your club competition for criticism. Should you find they do well, send some to the international exhibitions. If you have created artistic portraits, you will be rewarded with a good percentage of exhibition acceptances, and you will have found a fascinating new outlet for your creative ability.

Professionalize Your Show with Tape Recordings

GEORGE W. BLAHA

THE ADVENT of wire and tape recorders at a price within the means of amateur photographers is proving to be a popular and convenient manner in which to furnish an appropriate musical background with commentary for slide and movie presentations. Experimenting with this new medium is not only fun but also educational. You will learn much about reproduction of voice, music, diction, and recording technique.

The methods described in this article are applicable to either wire or tape recordings, travelogues or lecture programs, and, in general, to slides or movies.

Most recorders have a built-in amplifier that has sufficient output to accommodate the average home audience.

However, better control of the recording may be obtained by the use of an additional high-quality extension speaker which should be placed near the projection screen. The source of sound then is in front of the audience, allowing the recorder to remain close to and under the control of the projectionist.

The task of synchronizing a wire or tape recording with movies is much more difficult than with a slide lecture since speed of the movie projector is variable and some means must be devised to keep the two machines synchronized. A discussion of this problem is beyond the scope of this article. However, an excellent article on this subject appeared in the August 1948 issue of *PSA JOURNAL*, entitled "Syn-

chronizing Magnetic Sound," by B. J. Babbitt.

Much planning is necessary before a recording can be made. First, the material for the presentation must be selected and arranged in an orderly sequence. For a travelogue, the chronological order in which the pictures were taken usually produces an interesting story. Titles should be included, especially at the beginning and end of the show, with a generous number throughout to add continuity. Sign posts make interesting on-the-spot titles and add variety and contrast to the prepared titles which are needed to coordinate the succession of subject matter.

Then begins the arduous task of preparing an interesting and informa-

tive commentary, because the success of any tape-recorded program is dependent upon the smoothness of presentation. In developing your travelogue, you will find travel folders and books on the subject invaluable aids. The commentary must not only be factually correct but also "tailor-made" to fit the pictures. Here again, continuity must be maintained or the presentation becomes just a series of pictures, each with an individual description. It is well to remember that the audience has not participated in the experiences you encountered when filming your travels so you will want to strive to produce something which will leave them with a feeling that they too were there. You'll probably re-write the script a number of times before you are completely satisfied with it.

Before recording, try reading the script aloud several times without the pictures. This is a real test of its continuity and will reveal whether or not any changes need to be made in the text or sequence of the pictures. After several readings, you will be so familiar with the commentary that you will not stumble over words and can determine the length of time required for your program. If you are going to add a musical background, you will want to select music which is appropriate to the theme of your travelogue or lecture. An article entitled "See It with Music," which appeared in the 1949 Annual Issue of *PSA JOURNAL* lists some records suitable for general programs and gives some suggestions regarding the type of equipment needed for playing them.

Making a recording takes time and requires much patience. If your recording is to be a half hour in length, allow several hours for making it. Various types of equipment may be used and the results will vary accordingly. The Color Division has done some real pioneering in this medium and the conclusions set forth in this article are based on its experiences with a Revere tape recorder.

Basic equipment needed for producing a high-quality tape recording are a recorder and recording microphone, a public address system suitable for reproducing voice and music, and a double turntable phonograph. Best results will be obtained if the recording is made in a sound-proof room. Three people are needed—one person to control the public address system and music, a second person to operate the tape recorder and act as general coordinator, and, lastly, the commentator. They should be posi-

tioned in a triangular arrangement with the operator of the tape recorder in the middle.

Pre-arranged signals should be decided upon before starting the recording so that very few, if any, stops are made during the entire recording period. To the best of our knowledge, background music must be recorded at the same time as the commentary on all the currently available recorders. This creates a problem if it becomes necessary to stop and erase at a given point since it is difficult to resume the music at the stopping point so that it will not be obvious that the recording was stopped.

An amplifier with at least two channels produces good results since one may be connected to the commentator's microphone and the other to the double turntable which produces the music. This permits monitoring of both the voice and music and allows one to hear the program as it will sound in its final form. The microphone of the recorder should be placed near the outlet speakers. The commentator with his microphone should be opposite but facing the operator of the public address. Several test recordings should be made to determine the voice and music levels. One caution should be observed here—that is to keep the music soft enough so that it does not compete with the commentator. It should also be remembered that the function of the music is to create atmosphere, to fill in the gaps between

comments, and should always be supplementary to the voice which tells the story.

Satisfactory results may be obtained by using just the microphone of the recorder for the entire recording if a public address system is not available. But it is not quite so easy to modulate the voice and music under this arrangement. The voice distance must be determined and the speaker furnishing the music must be set at a distance so that its intensity will blend in with the voice at the proper level. No monitoring can be done while the recording is being made and the resultant combination of voice and music cannot be heard until the playback.

You will note that no reference to the projection of the slides or movies was made during the entire recording procedure. This was intentional. The noise of the motor of the projector will be picked up by the recorder, and so it is best if the projection timing can be worked out in advance in order to eliminate the projector completely during the recording. With slides there is not too much of a problem because only sufficient time to change each slide need be allowed.

Perhaps it sounds like a lot of work to make a tape or wire recording. It is, but you will have a lot of fun making it, and once the job is done it is very simple to put on a show. Your audience will be very attentive and you will take pride in presenting a professional-like performance.



WHEEL REPAIR

Blanche Kolarik

"Afternoon Shadows," a native hut in Recife. Native huts are skillfully fashioned of interwoven sticks plastered with mud and painted in pastel colors of many hues, some with thatched roofs. All photos by Foster E. Moyer, PSA.



"Beached." Jangada on the beach near Boa Viagem, a picturesque section of Brazil, where color film is a must.



B R A Z I L

Land of Beauty and Color

FOSTER E. MOYER

BRASIL has a natural unsurpassed beauty of its own. Nowhere can you find a greater variety of scene and of interest. From the Amazon River on the equator (the world's largest river, navigable 3,000 miles) to the southernmost part of Brazil lies a country ranging from the tropics to the semi-tropics. No matter what part of this great country you plan to visit, pictures that are different are waiting to be recorded. You will be pointing your camera constantly at an ever-changing panorama of vast unexplored jungles, sugar and coffee plantations, quaint villages and colorful markets. In contrast to these endless possibilities are the opportunities presented in Sao Paulo, the fastest growing city in the world, where new skyscrapers seem to appear over night, and Rio de Janeiro, one of the world's most beautiful cities, nestling among hills of solid granite.

Brazil is larger than the United States of America by the size of the state of Texas. The last census taken in 1947 credited Brazil with approximately 47 million people. The Brazilian of today has the characteristics of several ancestries, resulting from the blending of all the racial groups which have gone into the making of Brazil. It is interesting to note that the core of the present Brazilian population stems from the mingling of the white, red, and negro races with the white in the minority. There is no racial discrimination and in Brazil it is not necessary to call attention to the fact that all men are born equal; it is taken for granted.

It is well to remember that it is the people who make a country. The charm and beauty of any land is best expressed in its people, and you will always find them photogenic. Without them, your collection of pictures would be meaningless and lacking in human interest. Children at

Top: Coastal boats at Recife. Center: Pack horses at rest. Bottom: Native fishermen on Copacabana Beach.



play; peddlers and street vendors with their many wares, some on donkeys, others on foot with bundles balanced on their heads or shoulders; natives at work or eating their noonday meal of brown beans, rice and coffee prepared over a charcoal fire; jangada fishermen who ride the waves as far as twenty to twenty-five miles from shore on rafts made of driftwood tied together with one sail; dock workers and sailors loading and unloading the boats in the harbor, some of which are left high and dry when the tide is out; pretty señoritas framed in tropical settings of breathtaking splendor; aged people, some weary and tired, others with an air of arrogance . . . all these are good subjects for your camera.

The street scenes and scenery come naturally no matter where or at what you point your camera. For instance, you will be photographing old churches, some amidst a setting of royal palms, with their white spires standing out against the brilliant blue sky; native huts skillfully fashioned of interwoven sticks plastered with mud and painted in pastel colors of many hues, some with tin roofs, others with thatched roofs and still others with tile roofs; beautiful modern homes of the well-to-do, many with hand carved mahogany woodwork; spacious parks with their flower gardens, lily ponds and shrubbery trimmed in various shapes and designs. Blue skies, white clouds shifting constantly in abeyance to nature's moods, and changing color are a challenge to the photographer to capture on film.

All my color work was taken with a Leica Model G equipped with a Summar 50mm f/2 lens. I also used a 35mm f/3.5 Elmar wide angle and Elmar 90mm f/4 telephoto lens to good advantage. The Universal viewfinder, sunshade and haze filter were the only other accessories for my Leica. Kodachrome film, daylight type, was used exclusively. My first rolls of color were overexposed because I disregarded the readings of the Weston Master Exposure Meter as I thought the readings were too high. After making allowance for the high actinic value of the sunlight in a tropical country and the amount of reflected light or glare present, I standardized most of my exposures at 1/60 at f/9. All my pictures were taken in bright sunlight under ideal conditions. I used the Elmar 35mm lens quite frequently as it gives an excellent field of view with no noticeable distortion of any amount, provided you are careful to keep the camera on an even plane and not too close to your subject. All shooting was done without a tripod; thus proving, if only to myself, that it is possible to take sharp pictures at 1/40 to 1/60 of a second when hand-held.

Many of the more than one thousand color slides of this fascinating country have been accepted for exhibition in leading color slide shows. These, together with other selected slides, have been assembled and presented in lecture form.

If you have the urge or opportunity to visit Brazil, you have a choice of four means of transportation. The airplane is the easiest and fastest. Then there is the ocean liners which ply between New York and Rio de Janeiro. Not to be overlooked are the tramp steamers and freighters which carry a few passengers. A combination sea-air trip can also be arranged.

The climates of the Southern Continent are so varied that practical itineraries of pleasure travel can be planned for any time of the year. The elevated mountainous regions, even on or very near the Equator, enjoy a temperate but stimulating climate throughout the year. Sea level regions in the Tropics are warm but in South America they are usually fanned by either sea or mountain breezes. There are

only a few climatic considerations of importance to the traveler. South of the Equator the seasons are reversed. Our summer is winter below the "Line." From June through September there is considerable rain from Belem on the Amazon south to Rio. As to clothing, the usual spring and summer clothing will take care of your needs. Don't overlook a raincoat.

Passports are needed for all South American countries and must be visaed. The following documents are also required: Certificate of Good Health, Certificate of Good Character, certificate of vaccination against smallpox, and a letter stating the purpose of your trip. Unlike other South American countries, the language spoken in Brazil is Portuguese and not Spanish.

Due to the present restrictions on the sending of money out of Brazil, color and movie film is very scarce. The only Kodachrome I was able to buy was in a few of the photo shops in Sao Paulo. A friend of mine, who returned from a visit to Brazil several months ago, informed me that color film was still hard to get. In fact, he was unable to obtain any. So in planning a photo vacation in Brazil, be sure you provide yourself with an ample supply of film; preferably tropical packed. Silica Gel and tin cans with tight fitting lids can also be put to good use for storage of unexposed film. There are no facilities in Brazil for processing of Kodachrome film. It is advisable to airmail the exposed film to the States for processing as soon as possible after exposure. At present there are no restrictions on the sending or taking of exposed film out of the country.

For traveling in Brazil, the airplane is the main means of transportation from city to city. Except for short distances, roads are few. Outside the cities, the roads are dirt, rough, dusty and tortuous. Railroads originate in the larger cities and connect smaller towns within a radius of perhaps 200 miles. So it is impossible to travel by road or railroad from the north of Brazil to the center, or from the center to the south.

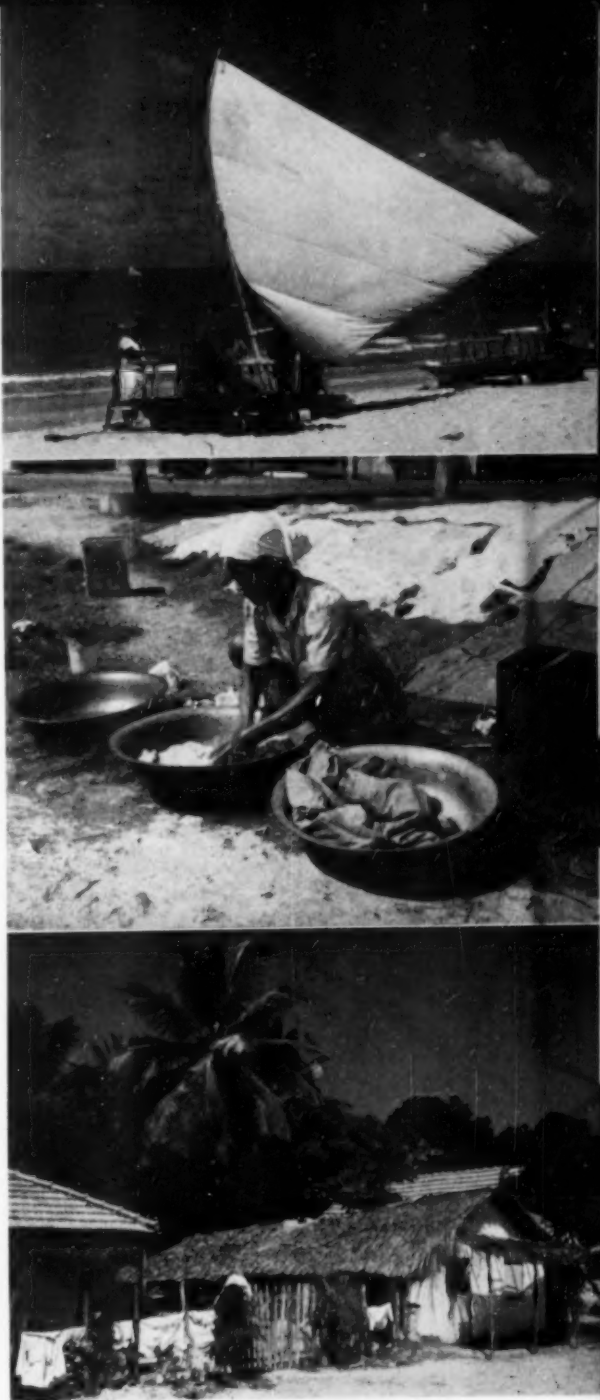
On one trip I took from Recife inland 160 miles to Garrahuns, the wood burning locomotive was changed three times instead of reloading the tender with more wood. This trip took a little more than eleven hours one way.

The State of Sao Paulo has an intricate network of railroads. In fact, the line from Santos, world's largest coffee port, to Sao Paulo, 3,000 feet above sea level, is an engineering feat. At the base of the mountain and on top are large railroad yards. Here the trains are broken up into two-car sections. The climb is divided into eleven levels, each having its own system of continuous cable. A small pusher type locomotive and two cars are hooked on the cable at the bottom of each level and another similar unit attached to the cable at the top. The section coming down acts as a counterbalance for the section making the climb. The turn-outs are at each level and the changes to the next cable are made there.

Rio itself is also well served, but as far as the rest of the country goes there is very little transportation indeed.

Saturday in Garrahuns is market day. It is quite an unusual and notable sight to see the natives squatting in the streets with their varied products and wares. Here you can buy, sell or barter practically everything from the bare necessities of life to the luxury items. Not to mention the field day you can have capturing on color film the great spectacle spread out before your eyes.

Recife, the principal city of northern Brazil, with its extensive commerce in northeast products (sugar, cotton, castor seed, tropical fruits) and its excellent port affords



Top: Jangada fishermen. Center: The laundry woman. Bottom: Native huts at Recife.



Pottery in the street market of Garrahuns.

a first-class opportunity to photograph the many coastal boats and bustling activity of life along the waterfront.

Everyone looks forward to the stop-over in the fabulous

city of Rio de Janeiro. Here you can make the cable car ascent to Sugar Loaf and drive to the soaring height of the Corcovado, where the colossal statue of Christ overlooks the city and the entrance to the harbor, considered one of the most beautiful in the world. Along the waterfront, quaint fishing villages and miles of beautiful beaches will present still more opportunities for good color shots.

I have only touched upon the highlights offered by this great South American country. You might like to plan your trip for "Fiesta" time, a gala three day holiday preceding Lent with colorful street parades, dances, private parties, beautiful girls in shimmering gowns of silks and satins, the men bedecked in regal costumes of varied hues or disguised as ravishing females. Many side trips can be arranged to places of interest off the beaten path. Imagine the thrilling experience of cruising up the Amazon to Manaus through the heart of the Brazilian jungle, stop-overs at the interesting and colorful ports of Northern and Southern Brazil, or a visit to the lands of the Brazilian gauchos.

When you return home you will find yourself projecting your treasured slides over and over again; reliving the unforgettable visit to this picturesque land of beauty and color.

The Kodak Flexichrome Process

W. K. RANWORTHY

EDITOR'S NOTE: Because it will be of interest in itself and because it so well shows one phase of the PSA Color Division's many services to its members, we are publishing in its entirety the Color Division Testing Service's final report of its investigation of the subject process. The tests reported are probably the most thorough given the process outside the manufacturer's own laboratories and were made by personnel with no private interest to influence the tests. Your editor's conclusions after reading the report, seeing prints made by the process and actually watching prints being processed are that while the process is not one for the beginner in photography, it is entirely practical for the average worker. Many thanks are due to the author for a difficult job well done.

The purpose of this investigation is to determine the merits of the Kodak Flexichrome Process and to evaluate the technique in terms of other familiar color processes. It is consistent with the previously established policy of the PSA Color Division and is conducted as a service to the members of the Division.

This report covers the examination of the process in a manner believed to be consistent with requirements. Familiarity with the process, was established thru actual use of the process in accordance with the manufacturer's published instructions. Processing chemicals were examined, and estimates made as to their probable composition and function. In cases of doubt, qualitative chemical examinations were made to determine the facts. In short, the process was examined in such a way as to allow a reasonably accurate appraisal of the technique and materials as compared with other familiar processes.

The color process recently announced by Eastman Kodak Company and known as the Kodak Flexichrome Process is not a new process. It is the invention of Mr. Jack Craw-

ford and was marketed more than 10 years ago under the name "Flexichrome." Apparently the process never achieved great popularity.

Essentially it is a combination of photographic and hand-manipulated processes. It differs from ordinary hand coloring, however, in one main respect: the use of a positive gelatin relief image. The response of such an image to the acceptance of manually applied color is automatic, and is in direct relationship to the varying thickness of the relief image. Thus, a shadow, representing a high relief, will accept its full quota of color; diffuse highlight areas will accept very little color; and specular highlights containing no gelatin relief will reject color and remain substantially clear. The relief image operates identically to the matrices employed in the Dye Transfer and similar processes.

The Original Flexichrome

In its original form, the process consisted of 20 steps and required two hours processing time including final drying of the black and white print. It employed a blue sensitive emulsion capable of being processed to a relief image. Exposure was by contact or enlargement from a black and white negative, and was made thru the film base rather than in the conventional manner. The resultant image, after processing, was thus made integral with its support. Development was from 4 to 6 minutes in a two-solution developer of substantially conventional composition. The developer components were variable to accommodate several degrees of contrast. After a five minute wash, the film was bleached in a conventional bichromate—chromic acid—sodium chloride solution. This converted the silver image to silver chloride, white, opaque. Non-image gelatin was

next removed by a hot water treatment (110° F.) until completely free from soluble gelatin, after which the relief image was chilled in cold water. The silver chloride was next removed by treatment in an acid fixing bath of conventional composition, and the film was washed for five minutes.

Removal of the light brown stain resulting from previous treatment was optional at this point. If desired, it could be removed by bathing for about one minute in the usual permanganate-sulfuric acid bath, and any resultant brown manganese dioxide removed by subsequent treatment in the original fixing bath. A wash and drying operation completed the preparation of the relief, which was now substantially transparent, with little evidence of an image.

The film was next immersed in a black dye solution furnished with the Flexichrome kit and called a modeling agent. Treatment was from 20 to 30 minutes. The black dye was absorbed by the gelatin, thus restoring the image to a visible black and white image similar in appearance to an ordinary film positive. Several rinses in dilute (2 to 3%) acetic acid removed excess surface dye, after which the relief was dried.

The back of the film was next roughened with powdered pumice or similar abrasive to provide a "tooth" for accepting the white backing which was applied in liquid form with a brush to simulate white paper. Two coats of the "liquid paper backing" were applied, with a drying operation between coats.

Upon completion of the foregoing treatments respectively, the picture appeared as an ordinary black and white paper print and was ready for coloring. This was done with brushes, using the Flexichrome colors applied locally as a wash. The vehicle which carried the colors was dilute acetic acid, and the sequence of operation was to apply the color, blot, flush with clean dilute acetic acid, and blot. The blotting material could be any plain, white, absorbent, lint free, paper substance. The black dye image was thus replaced by successive application of color, and the final result was a print in full color. Any desired color scheme could be employed, and this could be altered at will, since subsequent application of color would replace that previously applied. For example, an area erroneously colored blue when it should have been yellow, could be corrected by several applications of yellow color. The first application would perhaps produce a blue-green, the second a yellow-green, and the final application a pure yellow.

The process recently introduced by Eastman Kodak Company, and known as the Kodak Flexichrome Process, is substantially that described above. It employs a stripping film, however, approximately .001 inches in thickness, which allows the relief image carried on this thin support to be separated from the original film base and transported to a permanent paper support. This eliminates the coating operation previously employed to simulate a white paper base.

Stripping the Film

The stripping operation is done after the image has been dyed in the modeling agent. It is accomplished by treatment in warm dilute acetic acid for a length of time sufficient to soften the adhesive layer, after which the thin top assembly can be lifted from its base and placed upon the paper support. This can be ordinary photographic paper, previously fixed and washed.

The only difficulty of consequence encountered throughout the entire process was during this phase of the work. It was caused by small amounts of dye carryover on the

under side of the stripping layer during the transfer of this unit to the permanent support. The black modeling agent bleeds slightly while in the warm stripping bath. Some of the dye attaches itself to remnants of the adhesive, and is thus carried over onto the paper support. A pattern is produced, peculiar to circumstances at the moment of contact with the gelatin paper surface, since conditions are ideal for imbibition. The dye pattern is thus foreign to the image, and since it lies in the gelatin of the paper support, it cannot be removed. If sufficiently prominent at the time of transfer, it is frequently possible to immediately lift the layer from the support, rinse in warm dilute acetic acid, and replace upon another clean support. Otherwise the blemishes will show in the final print and cause its rejection.

To preclude occurrence of the trouble, it was found desirable to rinse the stripped layer in two changes of warm dilute acetic acid prior to bringing it into contact with the final support. This removed all of the adhesive material and cleared the under side of the film from modeling agent so that no further difficulty was encountered. Perfect transfers were made thereafter.

The Developer

A special Matrix Film Developer has also been introduced. The film requires two minutes treatment in this solution which functions simultaneously as a developer and tanning agent. Developers of this type (tanning developers) have been known for more than 50 years and have been employed at times by processes long in oblivion; Duxochrome, Colorstill, the Deeks Process, and the initial Technicolor Process.

The use of this packaged preparation gives a much tougher image than previously possible thru use of conventional type developers followed by tanning bleaches. The developer is supplied in two sizes; three quarts and three gallons, and is the same solution employed for the preparation of matrices in the Dye Transfer Process. The formula is not published, nor do the manufacturers intend to reveal it, but previously conducted work in connection with the Dye Transfer Process has disclosed the probable nature of the components of this preparation. Flexichrome prints so processed appear visually comparable to those in which the packaged material was used.

The developer permits five degrees of contrast by varying the proportions of each of the three solutions, one of which is called the contrast control solution. The use of No. 6 (K-1) and No. 35 filters is also recommended as a means to regulate contrast, with or without the aid of the contrast control solution.

For use, the A and B components of the developer are measured out and brought to the correct temperature, after which they are mixed in the tray and the film immediately immersed. Once mixed, the solution turns brown very rapidly, and is stable for only a few minutes.

The Contrast Control and Bleach Solution

This solution was examined chemically and found to consist of a weak solution of boric acid. Addition of this substance to the developer acts as a buffer, and prolongs the effective life of the mixture, thus increasing contrast. Within definite limits, the more contrast control solution added, the greater the contrast.

The bleach solution is also a packaged preparation supplied in quantity sufficient for one gallon of working solution. For convenience, each package consists of eight units,

and each unit consists of two foil wrapped packets. A unit is sufficient for 16 ounces of bleach solution when the contents of each foil packet is dissolved in turn in this quantity of 2% acetic acid. The mixture is discarded at the end of each day.

The Fixing Bath and Modeling Agent

The fixing bath recommended by the manufacturer is, of course, Kodak Acid Fixer (packaged). That employed throughout this investigation was the standard F-5 bath prepared from formula. The use of this bath was primarily a matter of convenience, since it was at hand. Other acid fixing baths would most likely have served as well.

The modeling agent is supplied in concentrated liquid form in quantity of 16 ounces. The addition of 3 parts of water to 1 part of the concentrate provides the working bath. It is used until exhausted (about 2000 square inches per quart). It is essentially a black water and acid soluble dye, appropriately stabilized to prevent precipitation, and apparently provided with a fungicide to discourage mould growth. In use, the dye is absorbed by the gelatin relief image, and provides a black and white print hardly distinguishable from ordinary silver image prints. The dye also serves to modify the colors with black, giving the appearance of colored objects in light and shade.

Coloring the Print

It is not proposed to deal with the coloring of the print at any great length. This is a relatively simple matter if directions are followed closely. This phase is fully covered in the instruction manual furnished with the set of colors, and no particular skill is necessary other than a working acquaintance with colors generally, so that proper tints and shades can be obtained. Generally speaking, a knowledge of the behavior of light on three-dimensional subjects in color, the type of treatment which will flatter the subject, and an idea on how to dramatize it to produce a desirable result, is all that is pre-requisite. The actual application of color presents no problem.

First attempts at coloring resulted in failure. Later it was found that the colorist had been mixing the reducer with the colors in an apparent attempt to obtain a particular tint. Since the reducer was primarily intended to remove color, its addition to the colors was at cross purposes, and this appears to explain the failure. A second colorist had no difficulty, and very first attempts produced acceptable results.

The Reducer

The primary function of the reducer is the removal of unwanted color. It is most generally useful for improving the whiteness of white objects. Unlike the other Flexichrome colors, it must not be mixed with the 2% acetic acid solution. The reducer must be mixed with plain water, and is applied and blotted in the usual way. It is white in appearance, and a cursory examination indicated the presence of glycerine and a second substance resembling stearic acid, spermaceti, or related compound. Ionization of the glycerine could furnish sufficient hydroxyl ion to act as a mild alkali. Since the matrix must be in an acid condition to accept the dyes, the addition of an alkali will reverse this condition and cause them to bleed, thus effecting their removal. Local tap water (chlorinated) has a mild effect, and distilled water a somewhat more pronounced effect in this regard; and the slight bleeding produced by the application of water, generally, can be conveniently used to blend the colors together. The action

is stopped by immediate blotting and subsequent flushing with dilute acetic acid. The reducer finds greatest usefulness for improving the whites of eyes, teeth, and accentuating highlights generally.

The Transfer Sheet

In use, a piece of this material cut slightly larger than the stripping layer, is wet with the 2% acetic acid solution and laid over the gelatin relief image. It serves to protect the image while being squeezed to the final support. It appears to be a polyvinyl plastic or similar substance. Such materials, moderately priced, are available in department stores by the yard, and find use in the household as shower curtains.

Summary

The Kodak Flexichrome Process as recently introduced employs substantially the same general technique revealed in the original disclosure of the process. The use of a stripping film is new. The original developer has been replaced by the Kodak Matrix Film Developer, and the bleach by the Kodak Flexichrome Bleach. Both of these materials are now supplied in packaged form, and no alternate formulas are indicated.

Some improvement in the developer was evident as compared to that previously used in Dye Transfer work. Former solutions had a tendency to support a fungoid growth. This tendency has been eliminated in the newer formulas by addition of a fungicide.

The introduced changes greatly expedite the processing of the matrix film and result in a much tougher image. The overall indicated processing time of 15 minutes, exclusive of final drying, is a decided reduction from the two hour period previously required.

It was not the original intention to include a consideration of negative quality in this investigation, this characteristic being assumed. The success of the process, however, depends to such a large extent upon good negative quality at the outset, that the importance of this phase must be emphasized. The addition of color to a mediocre print cannot compensate for lack of drawing and definition. For negatives made with this process in mind at the outset, comparatively flat lighting is suggested, and the type used for color reproduction in general is recommended.

The indicated use of Flexichrome appears equally divided between commercial work of the strictly illustrative variety, and portraiture; and it appears eminently suitable to both of these. Commercially, it is well suited to the preparation of display pieces for window use. In sales presentations it allows a variation of color schemes with the same model to create appealing sales arguments. The field of portraiture allows the same flexibility, and portraits appear especially susceptible to this treatment.

The use of a single black and white negative is a decided advantage over the somewhat complicated separation negative technique employed by other processes, and color prints made with the Flexichrome Process compare favorably in quality with similar prints made with the Dye Transfer Process. Critics who had an opportunity to compare them were in general agreement on this point.

The results of this investigation have substantiated the claims made by the manufacture of the product. No further work along this line is therefore contemplated.

The Color Division acknowledges with gratitude the cooperation of Mrs. Louise Broman Janson, Chairman, PSA Nature Division, for the use of her portrait negatives.

COLOR IN NATURE

EDWARD A. HILL, APSA

COLOR is a sensation, nothing more. It is a sensation or idea that occurs only in the mind, nowhere else.

There is no pigment, substance or form of energy that is color; it is only an idea. At first this concept of color is sensational to most of us because all our lives we have been conditioned to think that the world in which we live is as it seems to be. But things are not always what they seem, and an outstanding example of this is color. Grass is not green, blue birds are not blue, roses are not really red. But in a world such as ours it is necessary for us and for other creatures to find our way about and "operation color" is one of the many and complex mechanisms by which we are able to do so.

This world is made up largely of waves, or vibrations. There are cosmic waves, sound waves, heat waves, light waves and man has added radio waves, television waves and others. All of them are forms of energy, energy in motion. Most of them are similar except for the speed or wave length at which they travel. If they are traveling at ten trillion times a second, they are heat waves; if at ten quadrillion times a second, they are light waves. Light waves are not visible and they are not color.

There is a tremendous range of speeds in light waves, all of which are invisible, but there is a narrow band of them which has the peculiar property of rendering visible to us, other forms of matter upon which the light waves fall. It is called the spectrum and the rainbow is a good example. The longest waves which travel more slowly are called red and the shorter wavelengths are called yellow, then green and range into the shortest waves which we call blue and violet. Actually the words red, yellow and blue are nicknames used for facility instead of naming the speeds of the light waves.

However, when the whole range of these light waves, which we know as daylight, fall on a blue bird and a red bird, action begins. The feathers of the red bird absorb all the shorter waves as a blotter soaks up ink, but like a mirror, they reflect the long waves into our eyes. There they fall on the cells of the retina, sending a message along the optic nerve to the brain, creating there a sensation or idea. This idea is what we call red.

The blue bird's feathers, however, which incidentally do not contain any pigment, but split up the light beams by the striations in the feather structure, absorb the longer



Sparrow Hawk, smallest of the Falcons and not much larger than a Robin, is a colorful spirited bird. It is one of the protected species.

wavelengths and reflect only the short ones into our eyes. Then the retinal cells send a different message to the brain, creating a different sensation or idea, and this idea we call blue. It is only here in the mind that the color blue occurs, it is definitely not in the bird. Even if we use the word color in the casual sense, blue is one color which the bird is not, for it has reflected away from it all of the wavelengths we call blue and has kept none of them.

We might interject the question, "If a dandelion flower is blooming on the other side of the hill where no one sees it, is it yellow?" The answer of course, is "No." It is merely reflecting invisible light waves of a specific wavelength into the air. Operation color is partly in process but the second half of the operation is not present. There are no retinal cells to transform the impact of the light waves into a different form of energy flowing along an optic nerve and consequently the idea, color, never results. It is this extremely fascinating process that actuates so many of the intricate mechanisms of life, makes possible the existence of so many divergent forms in nature and the decorative designs and patterns which render this world such a beautiful place.

So the photographer, living in this age of color film, has at his disposal magic power which no previous generation of man ever knew. His tools will bend the invisible cosmic



Female Ruby-Throated Humming Bird, about 3½ inches long is a challenge to the nature photographer.



Chestnut-Sided Warbler with young Cowbird in her nest, from which she has expelled her own young.

forces at his will and reproduce masterpieces of such great fidelity that even a microscope discloses only their infinite accuracy of detail.

It is necessary to use the word color promiscuously for conversational facility, so we say the grass is green. But that does not mean that grass appears green to a mouse as well as to a man. The idea of green does not occur to the mouse mind. To him the world is a place of vague and moving shadows, much as it appears to us at night. Though he does not know it, green is the color of life for him as well as for us. The red blood in mammals is created only through the green blood in the veins of plants, chlorophyll; manufactured in the great green laboratory of a leaf. Our dependence on the green coloring matter is overlooked by most of us because of our complete conditioning to the superficial appearance of our surroundings.

A man may still be born, go to college, marry and rear a family, and by clever manipulation of his fellow man, amass a huge pile of what he calls security, and never come aware that all that he is or hopes to be, he owes to the plant kingdom. Yet it is true. Aeons and aeons before the mystic form of his race had ever been ground out of dark cosmic dreams, the ancient ferns, the club-mosses, the ancestors of the horse-tail, had to live and die in hot miasmatic marshes. There had to be a scattering of spores, perhaps from far flung planets. There had to be leaves, breathing out oxygen, to prepare a place for him—for his very cradle, linen from flax, wool from sheep, grazing over the high hill or in green pastures. They too, depend on the green of the plant kingdom.

Man's very bread, his very meat, all come through plants. Even the belching hells where man's cannon are made, burn coal that grew in the carboniferous age. A few years back a food ration book jolted us out of blissful unconcern, into a frightening knowledge of the barrenness of concrete pavements in a concrete kingdom. But apathy has again returned. Yet the lensman and the naturalist, reaching for a star, have clutched a blade of grass and we walk among plants with deep reverence, conscious of our dependence upon them, grateful to be here with them.

The so-called colorless plants such as Beech Drops and Indian Pipes, are ghostly white but subsist only on the decaying organic matter of plants that did have green leaves. A near-sighted caterpillar whose horizon is the edge of a leaf, may not know it is green as he munches it contentedly

by instinct. Perhaps his own color is the same and he thus escapes the sharp eyes of a bird in search of breakfast. But then again he may be bright in contrast and work constantly on the under side of the leaf, unconsciously escaping detection, yet his gay brilliance may be snapped up in a flash as the bird painstakingly turns over a new leaf. The Red Admiral butterfly carries a brilliant pattern of orange-red on the upper wing surfaces which taunts the enemy in bright sunlight as a waving red cape angers a bull, but as the chase proceeds the gently balanced wings need merely close against the bark of a tree and the color disappears, the brown whorled underwings matching invisibly the surface of the tree and the enemy is lost.

The color pattern of the Viceroy butterfly, a tasty morsel for some hungry bird, is so nearly identical with that of the Monarch which is bitter and impalatable to bird taste, that both escape devourment. So a clash of color may mean death for one creature and food for another, blending may mean escape for one and frustration for another; matching patterns may permit two pairs of wings to float safely on the summer breeze by confusing the enemy.

Weird is the word for the extreme lengths to which nature goes in its use of color for continuing life on this planet. One of the most bizarre examples concerns a flat-worm or intestinal parasite among insectivorous birds. The eggs which it lays in the bird's intestine, are excreted by the bird across the green foliage that may include leaves eaten by one particular snail, which must, for the success of our story, eat the egg along with the leaf. Once inside the snail the egg hatches and becomes a penetrating finger-like mass living all through the snail's interior tissues. A section of it will grow, tumor like, up into the semi-transparent eye stalk of the snail, which we often refer to as "horns," but which really support an eye on the tip. Here is where color enters the story. Once the parasite has squeezed up into the distended translucent eyestalk, it takes on red, black and yellow bands which show through and make the eyestalk look like a brilliant caterpillar. Have you guessed the rest? A bird comes along, thinking it has found a nice fat caterpillar, and snatches off the snail's eyestalk. If the bird swallows it, all is lost, because the digestive juices in the bird's stomach would dissolve it. For life to go on, the young worms in that tentacle must be taken home to the nest and fed to the baby birds whose digestive juices are not strong enough to dissolve them.



Black-Billed Cuckoo, taken by flash on her nest. From a 35mm transparency exhibited in a number of nature shows.



Wood Pewee, photographed about thirty feet from the ground. The soft warm tones of brown complete a pleasing color shot.

Once inside, they go right to work starting the cycle all over again. And what about the poor snail, oh, he just grows a new eyestalk again with a new eye on the end.

For me nature is so vast, so diverse and fantastic a challenge, that there is never a second's hesitation as to what to photograph next. I have scarcely time to feel sorry for those lensmen who seek subjects in vain when catkins of Wild Willow turn from red to gold, when pink flows from the petals of the Wild Rose into the rich red of the rose hips, or the last bloom of autumn, the Witch Hazel, unfurls its golden ribbons in October.

From the golden pendants of the Black Oak to the waving tassels of White Cohosh, there is a rainbow of color names that ring like variegated poetic overtones. Blue Vervain, Marsh Marigold, Orange Hawkweed and Painted Cup. Red Lily, Yellow Clintonia, Sea Lavender. Blue Eyed Grass and Grass Pink, Wild Indigo. Who could resist those titles for a color slide?

Think of the colors that have given names to birds. Red Eyed Vireo, meaning "I am green and have a bright red

eye." Black-Billed Cuckoo, Blue Winged Teal; Golden Crowned Kinglet. There's the Painted Bunting, Lazuli and Black Throated Green. One called Brewsters Yellow and the ethereal Cerulean Warbler.

But the color is often functionary, far beyond the by-product which we call beauty. In birds color is often a substitute for personality and memory. The stimulating sex marks like the Flicker's moustache, cause action and reaction. Color forces bees to visit a flower and to carry pollen from a thistle to a thistle, not from a thistle to a rose, that life may be spread across the meadow. In animals white fur blends with white snow or brown with the tone of the trees that life may be spared.

Yet the color camera is as sensational as color itself. When it is focused on nature it has a great task before it, a task that monochrome film can never accomplish. It can record the impact of the infinite invisible forces on flower and fur and feather. It can hold this moment of impact in defiance of time. It can re-create it at will in the mind of man. Was there ever a greater challenge?

A Trouble Free Camera Club

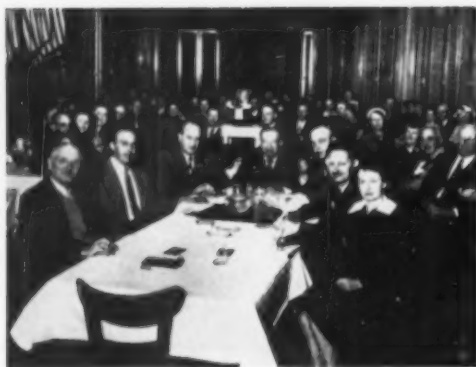
MERLE S. EWELL

DO YOU KNOW that there is a camera club which is celebrating its Tenth Anniversary this year, one which operates without constitution and by-laws, without rules or regulations and without *dues or assessments*? This unique group, known as "The Photochromers," was established by its present secretary, Harold C. Edwards, in Los Angeles in 1940. From the first meeting of 12 color fans in his apartment, the group has grown under Mr. Edwards' able guidance to one with an average attendance of 100 to 250 at their monthly meetings.

Shortly after having been bitten by the color slide photographic bug, Harold Edwards wanted to see more of the slides made by others and to learn more about his

fascinating new hobby. There were, to be sure, camera clubs in his area but all of them were almost exclusively black and white and gave very little or no time to this new fad . . . color. Edwards was interested only in color and felt that others might be too. Accordingly, the group which later proved to be the Charter Members of The Photochromers accepted his invitation to a little get-together at his home. Then and there a new camera club was born.

Mr. Edwards was made secretary, a post which he has held ever since the beginning. He assumed the responsibility for getting the programs. In those early days of color slides anything with color (the louder and brighter the better) was wonderful. He invited anyone whom he heard



Photochromers' Court—May 31, 1950—Photo by Charles J. Norona. Principal participants left to right: Harold C. Edwards (Secretary of The Photochromers) originator of the Trial, Henry W. Greenhood (1950 President of The Photochromers) Deputy Court Clerk, Lynton Vinette, (Universal Studios) Defender, George F. Brauer (President of So. Calif. Biological Photographic Assn.) Bailiff, Byron S. Crader (Director of El Camino Real Color Pictorialists) Recorder, Fred R. Archer, FPSA, (Director of Fred Archer School of Photography) Judge Dick Farrell, (Chief Photographer of L. A. Daily News) Prosecutor, Merle S. Ewell (PSA Color Division National Committee) Chief Court Clerk, and Irene Blachut (Editor of Triangle Camera Club "Free Lancer") Court Stenographer.

of who had a few slides to come and show them. A feature of the club which still remains is that everybody who comes to a meeting shall be allowed to show at least ten slides, if he wishes. Some did not have their own projector and here was an opportunity to see them projected and to show them to an interested audience. The results have been that some slides made by beginners, often their first roll, sometimes so under- or over-exposed that the subjects were practically unrecognizable, have appeared on the screen. The range has gone from there up to slides which later have received high awards in top international color slide exhibitions.

Until 1947, Mr. Edwards carried the load of the club work almost single-handed with only occasional assistance from others. The club had been growing steadily from 12 to 20 to 30 to 50, etc. Eleven others who had demonstrated their interest were asked to join Edwards in carrying on the programs. The invitations were accepted and the Board of Directors came into being. Each of the 12 Directors assumed responsibility for one of the monthly meetings during the year and would act as Chairman of the evening. He would secure a speaker, demonstration or someone with outstanding slides, but always the second part of the program was reserved for the showing of members' slides. Incidentally, a person is a visitor only once, after the first night he is a full fledged member.

Meetings are held at Clifton's Brookdale Cafeteria in downtown Los Angeles. Those who wish come for dinner at 6:00 and the others come for the program which always begins at 7:30 sharp.

Some ask, "How does the club get along without any money?" The Directors each contribute \$1.00 a year. With this fund are bought letterheads, envelopes, ribbons for awards and a few other essentials. Notices of the meetings are sent out on postcards which are printed by one of the Directors. Anyone who wishes to receive these gives the

Treasurer 25¢ a year . . . this is not compulsory, mind you, but just for those who want the cards telling of the regular and special meetings. Another Director has access to a mimeograph and takes care of that type of work when it is desired.

What does the average member do? He just comes to the meetings and is entertained with some of the finest programs for which anyone could ask. He may show a few slides of his own now and then if he wishes. If he is just learning or has a problem, the more advanced workers are ready and glad to pass along any advice which they can to help him. He may participate in the Annual 10-Slide Competition which is held in December of each year . . . for the last two years there have been over 500 slides in each of the competitions. Awards are made by a group of judges (previous year's winners) and also by popular vote.

Studio Night is usually very interesting. Sometimes it has been held at the regular meeting place with models brought in by members . . . then it has been held at a regular commercial studio or at the Acme Camera Gardens with a group of some dozen professional models to be photographed. A picnic is held each July . . . this often draws more than 100.

If there is anywhere that a color slide fan can get more for his money, we certainly don't know about it. Mr. Edwards is to be heartily congratulated on the way in which he has brought the group up to the position in which it stands today . . . a most successful club known thruout the country . . . one with no rules, no regulations, no dues, no assessments and no constitution or by-laws.

TREASURER'S REPORT

1949 — 1950

BALANCE SHEET

Assets	
Current Assets:	Cash
Inventories:	None
Property Accounts:	Nothing
Intangibles:	Good Will
	Unlimited
Liabilities	
Current Liabilities:	\$00.00
Long-Term: Debt	Unobtainable
Reserves:	Boundless
Capital Stock:	Fine Members
Surplus:	None Yet

INCOME STATEMENT

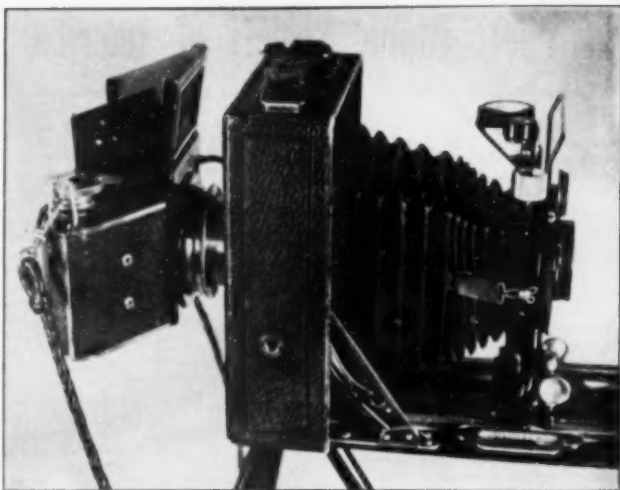
Income:	Fun, Knowledge & Frolic
Expenditures:	Hard Work by Directors

PROFIT: FRIENDSHIP

MERLE S. EWELL, Chairman of Finance Committee

MOST PHOTOGRAPHERS, it seems, are incurable gadget hounds, and many strange devices are in constant use, made to take care of some emergency or problem, and working well. Like many another shutterbug, I too have my prized Rube Goldberg. Since I specialize in color slides, and enjoy competition in both the color and nature fields, I am often confronted with the problem of taking a picture of a small object, full size or larger.

My solution to this problem is to couple two cameras together: a 9 x 12 Voigtlander Avus and an Exakta B. This permits using the Exakta with a Bantam adapter, which I prefer, as the added size of the Bantam frame permits some leeway in framing, which the 35mm does not readily afford. In operation, the rig uses the lens, iris diaphragm and focusing mechanism of the Avus, and the ground-glass, film transport and shutter of the Exakta.



An Exakta B mounted on the back of a 9 x 12 Avus view camera.

MY PIPE DREAM

PAUL J. WOLF

I had worked with extension tubes on the Exakta, and while they will give the desired result, they are clumsy to handle. It is often necessary to put them on, look at the image in the ground glass and then try two or three other combinations of the extension tubes in order to secure the desired effect.

Another member of my camera club, who also used an Exakta B, had a ma-

chine shop and was an expert at turning out all sorts of odd gadgets. Conversations with him brought out the fact that he used his Exakta on the back of a 4 x 5 view camera, with long focus lenses, and I thought that such a coupling device for my old but good 9 x 12 would be a great improvement. He therefore made me the coupling plate, which consists of a piece of 1/16" aluminum, of the proper size and shape to fit into the grooves on the back of the Avus, with a threaded tube attached to take the lens mount of the Exakta B, once the regular lens of the Exakta was removed.

This rig permits using the double extension bellows of the Avus. All that's needed is to measure the actual extension of the lens from the film plane, convert the marked *f*-stop to the actual stop by reference to a Lens Kodaguide, and make the exposure. The shutter of the Avus is open, of course, and only the shutter of the Exakta is used. And since the shutter of the Exakta has speeds up to 12 seconds, it will be seen that time exposures, which are usually necessary at the small apertures that extreme close-ups require to secure adequate depth of field, are easy. The movements of the front mount of the Avus, rising and falling, and sideways as

well, are a great help in composing, as is the fact that the mount provides a "revolving back."

And one last remark: a clerk in a large and well known camera store told another club member, who attempted to describe the above equipment, that such a rig was impossible, that it would not work, and that he was having a "pipe dream." But in the two years that it has been in use, this rig has proved so handy and useful that I can't quite see how I ever got along without it. For any sort of small object photography, it is tops. So, here's my "pipe dream!"



The plate on the back of the Avus is threaded to take the lens mount of the Exakta B.



SPOT LANDING

A. Stewart

The Photographic Society of America — Color Division

EVEN THOUGH color photography has been the fastest growing photographic interest, the PSA Color Division has been able not only to match its growth but also to anticipate the needs of both beginners and advanced color workers, as well as of clubs and other groups in the field. Whenever individuals or clubs have needed any service, the Color Division has been ready to take care of their requirements.

AS FAR AS individual members are concerned, all activities are available at no extra cost except perhaps a little postage, as, for example, in forwarding slides, prints or books to the next participant. With one exception the same applies to member clubs, the exception being the National Club Slide Competitions in which an entry fee is charged to cover the cost of the many plaques, medals and ribbons awarded as trophies.

THE FIRST service which Color Division members receive is a comprehensive four-page guide which summarizes Color Division activities and tells them from whom these services can be obtained. Revised editions of these "Activities" sheets are sent out once a year. During the year members are notified of new activities and changes in the old ones by means of the Color Division "Bulletin," sent to members every two months. This "Bulletin" also keeps members advised of other activities and supplements the Color Division column and other color features in PSA JOURNAL, which all Society members receive.

INDIVIDUALS have such services available as a traveling Color Print Set, which shows examples of various color printing processes, a Color Print Service if they need help in solving print-making problems, a series of three (per year) Color Print Competitions which enable them to receive an evaluation of their prints by competent judges as well as giving them an opportunity to win medals and ribbons. Slide workers and makers of larger color transparencies have available a series of five (per year) competitions with criticism service and a fine group of awards. Also available to individual members are Exhibition Slide Sets with typewritten comments by leading slide exhibitors, and in many cases with tape-recorded comments which can be reproduced on the 3.75 inches per second tape recorders popular in the photographic field. As educational features we have Slide Circuits and Slide Study Groups together with special Slide Instruction Sets for beginners. A library service through which books and various "Annuals", many of them not commonly available, can be borrowed is another Color Division feature. Finally, in order that our members may receive proper recognition for outstanding photographic achievements or for noteworthy services to photography and photographic organizations, we have an Honors Recommendation Committee which not only acts in an advisory capacity but also watches to see that no worthy person is overlooked.

CLUBS have available a Color Print Set and a series of five (per year) National Color Slide Competitions with annual awards as well as awards for each competition, such awards being given to both winning clubs and individual club members entering outstanding slides. Larger than 2 x 2 slides are eligible in these com-

petitions and constructive comments are given on all entries. Exhibition Slide Sets are available as are a special series of Foreign Slide Sets from all over the world, many carrying with them tape-recorded comments in addition to typewritten ones. There are Slide Circuits for Clubs which enable them to compare their own work with the work of other groups. We are also prepared to answer questions on club organizational problems, on club activities including club competitions and exhibitions, and, where needed, we can furnish Judging Service.

RELATED ACTIVITIES. Perhaps our most important activity has been the establishment of a series of International Color Slide Exhibitions (the PSA Exhibition in 1943 was the first all-color exhibition ever held) and the establishing of standards for such exhibitions for the protection of contributors. Such standards include a time limit for the return of entries, they call for the prompt issuance of notification cards and catalogs, they prescribe an optimum screen illumination so that slides will be presented at their best and so that contributors can see in their own home how their slides will look when presented for judging and for exhibitions, if accepted. Other requirements and recommendations are included, and when exhibitions meet them their contributors become eligible for listing in the Color Division's "Who's Who In Color Slide Photography," published annually in the September issue of PSA JOURNAL. Exhibitions meeting certain more rigid requirements are given Special Recognition and are supplied with special Color Division medals to be awarded winning contributors at their next exhibition. In addition, we have services for both new and established color exhibitions, including organizations and operation information and a mailing list of 2000 or more leading exhibitors. Closely allied to the Annual PSA Exhibition is the awarding of the Clerk Maxwell Trophy for the best color print of the year, this award now being sponsored by the Color Division.

ANOTHER outstanding service to our members is a Testing Service which tests various color processes, films, etc. Results of these appear from time to time in the Color Division "Bulletin" and in PSA JOURNAL. Finally, for clubs and individuals who want to dress up their slide presentations, there is a beautiful membership slide which is provided at cost.

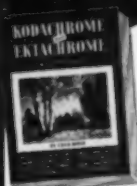
NOT ONLY does Color Division service make PSA membership an absolute necessity for all color workers but affiliation with the Color Division for PSA members in other Divisions will often make their membership in the Society doubly valuable at only a ten per cent increase in dues. If you are a member of the Society but not of the Color Division, all that is necessary to become a Color Division member is to send \$1.00 to Headquarters at 2005 Walnut Street, Philadelphia, giving your name and address and specifying the dollar is for Color Division membership.

If you are not now a Society member, fill out the membership application blank below, being sure to specify Color Division affiliation, and forward it together with \$10.00 to the address shown. If affiliation with other Divisions is desired, always a good investment, mark the application blank to show the extra affiliations and enclose a dollar for each additional Division specified.

(Keep This) Received of _____ Address _____ For items checked on the application blank, \$ _____ Signed _____ Address _____ Date _____	NAME	Mr. _____ Mrs. _____ Miss _____	DATE	_____		
	ADDRESS	_____				
	CITY	ZONE	STATE			
	Please enroll me as an Active Member of the PSA at \$10 for a full year, including one division I have checked. Also enroll me in the additional divisions circled below at \$1 each per year.					
	Color <input checked="" type="checkbox"/>	Motion Picture <input type="checkbox"/>	Nature <input type="checkbox"/>	Photo-Journalism <input type="checkbox"/>	Pictorial <input type="checkbox"/>	Technical <input type="checkbox"/>
	Total enclosed		\$ _____			
It is understood that the membership fee includes a subscription to the PSA JOURNAL for a full year						
PSA sponsor		PSA# 9/30				
Address _____						

Camera clubs, studios, business firms, stores, and manufacturers of photographic apparatus and supplies are eligible for special memberships. Ask for information. MAIL TO The Photographic Society of America, 2005 Walnut St., Philadelphia 3, Pa.

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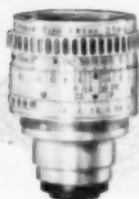
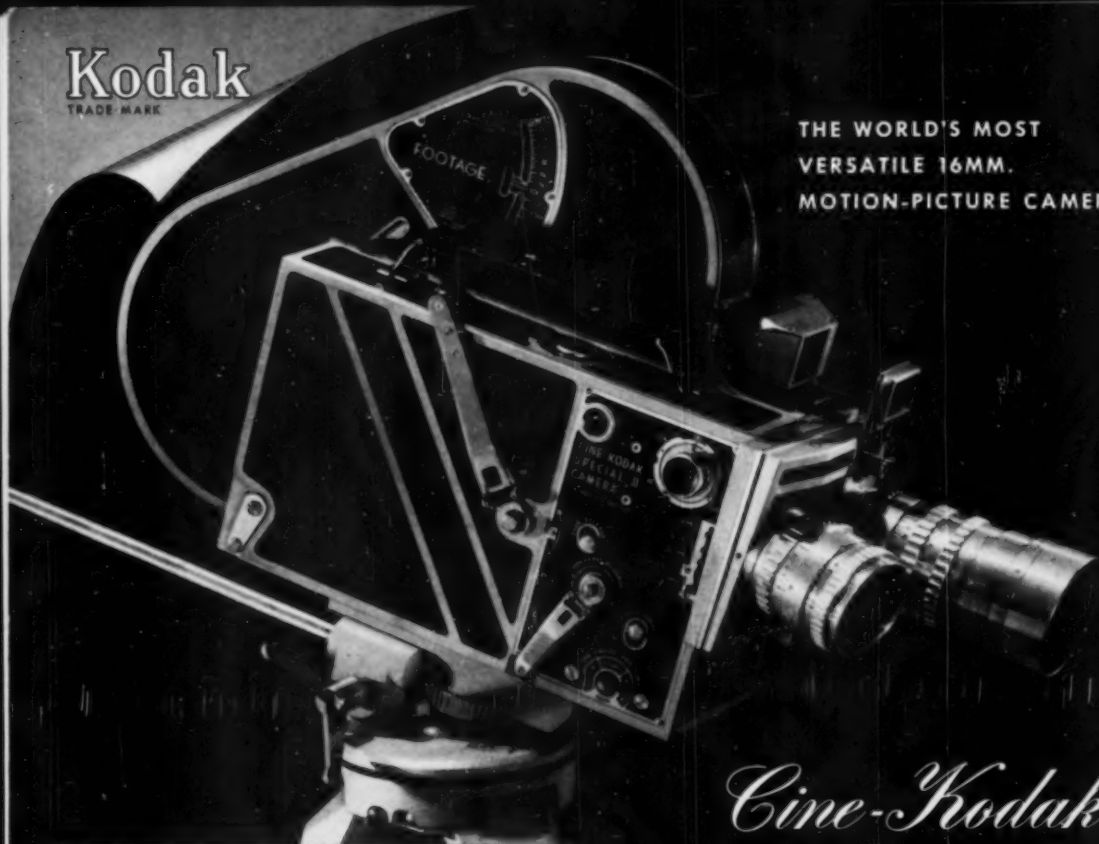
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